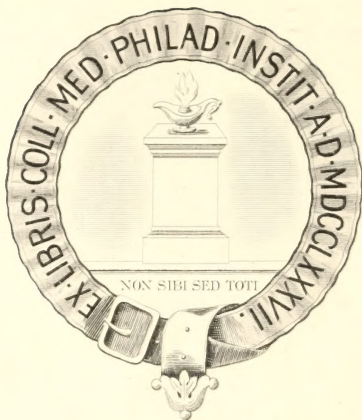


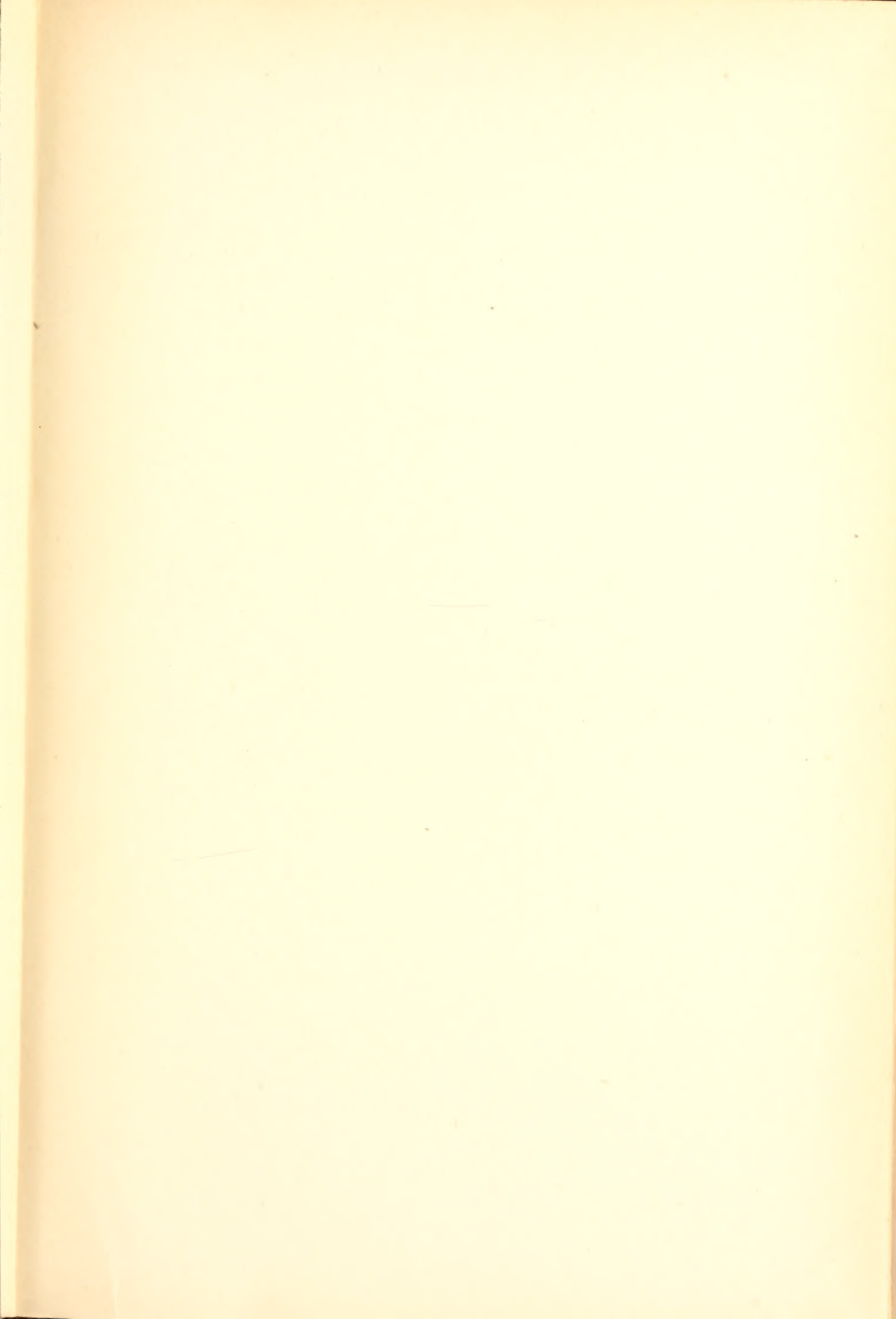


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THE HAHNEMANNIAN MONTHLY.

JANUARY, 1897.

THE PULSE.

BY CLARENCE BARTLETT, M.D., PHILADELPHIA.

(Two lectures delivered in the course on Symptomatology before the students of the Hahnemann Medical College of Philadelphia.)

FROM the very beginning of the time when the attention of man was directed to the alleviation of the pangs of illness, alterations in the character of the pulse were regarded as affording valuable means in the diagnosis and treatment of disease. It cannot be said, of course, that the theories prevailing in those ancient times had much in the way of truth to commend them to medical men of the present day. It is interesting, however, to note that the fathers of medicine differentiated pulse characteristics, assigning to each variation some important significance. Theories employed to explain the phenomena were necessarily absurd. How could they be otherwise in view of the fact that the circulation of the blood had not then been discovered. It was formerly believed that the arteries were full of air; that their pulsatile movements in different portions of the body occurred independently of each other and of the action of the heart. Afterwards when it was discovered that the pulsations of the heart and arteries were synchronous, it was contended that the dilating movements of these structures drew

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air into the body. Until the time of Galen it was believed that the aorta opened into the trachea, a belief—I might almost call it a superstition—that well shows the imperfect methods of observation of ancient times. With the advanced knowledge of the present day the indications of the pulse have lost none of their importance. On the contrary, our thorough knowledge of the physiology of the circulation, and the pathological conditions exciting disturbances therein, makes symptoms of the pulse second to none in diagnostic and prognostic importance.

In the examination of the pulse we make use of palpation and the sphygmograph, the artery usually selected for investigation being the radial. All available information can only be obtained by resort to both of these means of examination. The fact, however, that the educated touch can gain all practical information, excepting in rare instances, has led to the neglect of the sphygmograph by the majority of clinicians. Too many practitioners limit their investigations of the pulse to noting its frequency and strength, and by so doing fail to obtain much valuable information. A complete examination of the pulse should include observations as to its frequency, force, rhythm, and tension; as to the size of the artery and the thickness and state of its walls; and as to the character of individual beats with particular reference to the mode of onset and decline of the beat, and the length of time the distension of the artery is sustained. When noting the rhythm, attention should not only be directed to the regularity of the intervals between the beats, but also to the relative force of the different pulsations.

The most accurate results in the examination of the pulse are to be obtained only when three fingers are employed for palpating the artery. As to which hand should be used seems to be a matter of indifference with most physicians. I prefer to follow the advice of Broadbent, who advocates the use of the hand which will bring the index-finger towards the circulatory centre. I have fancied—and it may be only fancy—that the qualities of the pulse could be discerned better thereby. Now our observations begin. First we note the frequency, a very simple procedure, and yet one not always done correctly. Accuracy can only be secured by making the count for not less than thirty seconds. The estimation of the force of the pulse is more complicated. With the finger nearest the heart, the artery is com-

pressed until the circulation through it is obliterated, and the degree of force required noted. It may be advisable in individual instances to make compression with two, or even three fingers. When observing the rhythm of the pulse, care must be taken to discriminate between irregularity and intermittency. In the former the pulse-beats succeed each other according to no particular rhythm; while in intermittency a beat is dropped at more or less regular intervals. The state of pulse-tension is to be discerned by rolling the artery beneath the examining fingers, and noting whether or not it is filled between the beats. Under normal conditions the artery is full only at the time of the pulsation. In the case of high tension the vessel is full at all times, and when manipulated transversely by the fingers, rolls beneath them almost as if it were a cord or tendon. In a pulse of low tension the pulse collapses as soon as the height of the pulsation is reached; the artery can scarcely be felt as a vessel. Next we note the size of the artery. It will be observed that the radial artery varies in size in different individuals; that it varies from time to time, owing to differences in the degree of contraction and relaxation of the muscular coat of the arterial walls. We find that a large artery gives an impulse more readily perceived than does a small one, and thus we may make the error of assigning to the particular case in hand a strength of pulse in excess of that actually possessed by it. We find that the large artery is readily compressed. The small artery may appear abnormally weak; but compression obliterates the pulse with some difficulty; and may indeed show that it possesses a force of which the first touch of the observer gave no conception. To observe the state of the arterial walls, the examining fingers are made to manipulate the vessel longitudinally, varying degrees of force being employed. In this manner inequalities and thickness of the vascular walls become readily perceptible. Lastly, noting individual pulsations, we find that in some cases the onset is sharp or sudden, in others gradual: the subsidence of the wave may present like features; the distention of the arteries may be sustained, or they may collapse immediately after the completion of the distending impulse.

The normal pulse has a frequency of seventy-two beats per minute; its regularity is perfect in every particular; its tension is medium, and the artery cannot be rolled between the fingers;

the coats of the vessel present no irregularities; the impulse is quick, and the subsidence somewhat gradual.

Variations from the normal standard occur physiologically. Under the influence of exercise the frequency is increased and the tension raised. The same result follows emotional excitement. Cold stimulates the muscular coat of the artery to contraction; heat has the opposite result.

The frequency of the pulse varies according to the age of the subject, the sex, and the posture. At birth it is about 140 per minute; at one year of age, 120; at two years about 108; at ten years about 90. The normal standard of 72 is reached between the ages of 15 and 20 years. With advanced years, the frequency is increased, being about 80 at the age of eighty years. Women exhibit a greater frequency than do men. The pulse is more frequent in the standing than in the sitting, and in the sitting than in the lying posture. Variations are observable in the course of the day, frequency being the greatest in the afternoon and evening and lowest in the early morning hours. The pulse-rate is increased for a short time after a meal, and by the taking of alcohol, coffee, and tea. These facts teach us that due regard must be had to the selection of the time for counting the pulse. Especially does this apply to the state of the pulse in excitable subjects who have been rendered nervous over the thoughts of the impending examination by the physician. Under such circumstances, it is always wise to delay the examination of the pulse until sufficient of the physician's visit has elapsed to permit the patient's excitement to subside.

Pathologically, the pulse-rate is increased in fevers. There may be formulated the general rule that for each degree of rise in temperature, there is a corresponding increase of 8 beats per minute of the pulse. A notable exception to this rule is observed in typhoid fever, which is characterized in its early days by a rise of temperature disproportionately high as compared with the pulse frequency. Another notable exception occurs in scarlatina, in which the frequency of pulse-rate is disproportionate to the fever. The pulse is more or less rapid in all cases of asthenia, hence undue frequency is observed in the weakness during the course of and following exhausting diseases. As the general condition of the patient improves, the pulse-rate approaches the normal standard.

Extreme frequency of the pulse is observed in the various conditions giving rise to tachycardia or rapid action of the heart. Thus we observe in the course of Graves's disease or exophthalmic goitre remarkably high pulse-rates, 160 to 200 beats per minute not being uncommon, cases have been observed (idiopathic or paroxysmal tachycardia) in which the pulse runs up to 150 or 200 without apparent cause, and without associated symptoms of any great severity. Rapid pulse is observed as one result of nicotine poisoning, especially in adolescents and in persons addicted to the excessive use of tobacco for years. Alcoholic excesses likewise account for many cases of high pulse frequency. It is not improbable that quite a number of cases of rapid heart in youth are the direct result of disregard of morals and hygiene as related to the sexual organs. The so-called "irritable heart" explains high pulse-rate in certain cases. Locomotor ataxia is occasionally characterized by paroxysms of cardiac disturbance in which the heart's action becomes very rapid. Reflex irritation accounts for some cases of high pulse. Thus an acute indigestion may excite quite marked paroxysms of rapid cardiac action. The same is true of such affections as nephritic and gall-stone colic, as well as of other numerous painful affections.

Pain *per se* is sufficient to cause increased pulse-rate. I have several times utilized this fact to test the genuineness of alleged pain or sensitiveness on which claims for substantial damages have been based. Given a patient claiming sensitiveness of certain spots, pressure thereon—providing the pain is genuine and not assumed—should increase the pulse-rate.

Slow pulse is observed in quite a variety of conditions. It may also be physiological. We speak of the condition as bradycardia or brachycardia. The pulse-rate in the reliable physiological cases does not go below fifty; cases of 30 or 40 per minute have been claimed, but as Prof. Goodno remarks in his *Practice of Medicine*, it is not at all unlikely that some undiscoverable cardiac lesion underlies such cases. Many of these physiological cases appear to be examples of family traits or peculiarities. As evidence of cardiac disease, a slow pulse is observed in the late stages of valvular affections and of myocardial degeneration. It has been noted in numerous instances of post-diphtheritic paralysis. A slow pulse occurring during

convalescence from diphtheria should be a strong indication for cardiac rest. Other acute diseases have their convalescent stages characterized by this phenomenon, but in none of them can the symptom be regarded as of such importance as in diphtheria.

Before deciding positively in any given case that the pulse is really slow, one must compare its frequency with that of the action of the heart, for it may be that alternate contractions of that organ may fail to make themselves manifest at the wrist. This suggests a reference to the bigeminal pulse, a condition in which strong and weak radial impulses alternate; in other words, the pulsations come in pairs, each of which consists of a strong and a weak wave. The weaker wave, however, is very liable to vary in force in each couplet. This character of pulse is frequently observed in connection with mitral stenosis. Mental and bodily strain are other causes.

Slow pulse is observed in connection with some epileptic attacks. It was also observed by Riegel in a number of cases of disease of the urinary organs, especially in acute nephritis. In meningitis the pulse is sometimes diminished, a fact that is occasionally of diagnostic value, as enabling us to differentiate that disease and typhoid fever. Myxædema—a peculiar disease dependent upon disease of the thyroid gland—hypochondriasis, and melancholia are all conditions in which slow pulse is a prominent feature.

Next I come to speak of pulse tension and its variations. We speak of a pulse as of high tension, as I have already said, when the artery is full between the beats. To the touch, the vessel stands out as a cord. The stronger the pressure exerted upon it, the more energetic do the beats become. This is an important point to note, for it happens not infrequently in the absence of tests for determining the strength of the arterial impulse under different degrees of pressure, the tense pulse may give a false impression of weakness.

High arterial tension results from several general causes as follows: 1, increased volume of blood; 2, frequent and powerful action of the heart; and, 3, arteriole and capillary contraction. Under the first of these headings we note that the pulse tension rises after very full meals. Under ordinary circumstances, the quantity of food taken is such as to cause but

a temporary increase in the volume of the blood, and the influence of this is counteracted by the simultaneous relaxation of the blood-vessels. When, however, the quantity of food taken is unusually large, the tension is increased, and especially so if the arteries are diseased. In cases of nephritis, in which the urinary water is not eliminated, there is increased volume of blood, and, of course, resulting high tension. We often note increased tension in plethora.

The ability of increased and powerful cardiac action to increase intra-vascular tension is too plain to require any remarks thereon.

We find in arterio-capillary resistance the most efficient cause in the production of high arterial tension. Under the influence of external causes the vessels contract and high tension results. This fact is of considerable clinical importance in the ætiology of apoplexy. It has long been observed that this condition is especially liable to occur during the cold months of the year. The subjects of vascular degeneration, exposing themselves suddenly to the influence of cold, bring on high arterial tension, causing rupture of the weakened walls of some one or another of the cerebral vessels. The occurrence of so-called cramps, which come on while swimming, and which have been the cause of many accidental drownings, is believed to be due to increased arterial tension excited by the vascular contraction brought about by the sudden immersion of the subject in cold water.

High arterial tension is a pretty constant phenomenon in most cases of angina pectoris; indeed, it is held that the attacks are caused by the increased resistance with which the heart meets in propelling the blood through the peripheral vascular system. Practical use of this fact is made by the employment of glonoin or nitrite of amyl (both of which drugs reduce vascular tension) as palliatives. The results obtained from these remedies show the theory to be a good one, for they are generally used with great confidence by the majority of physicians.

Rigors occurring in any disease, hysteria, meningitis, migraine and neuralgic pains generally, are all conditions in which high arterial tension is observed.

The occurrence of high tension as the result of capillary resistance may be set down as due, in a general way, to the action

of poisons circulating in the blood acting upon the capillaries. These poisons consist, as a rule, of nitrogenous waste. This explains the occurrence of high tension in the course of kidney disease and gout.

High tension from arterio-capillary resistance occurs in old age, as the result of hereditary tendency, in renal disease, gout, diabetes, lead poisoning, pregnancy, anæmia and emphysema. The existence of high arterial tension in families is a well-attested fact. It affords the only rational explanation of the tendency of apoplexy to run in certain families, as it does also of the family tendency to sudden death from heart disease.

Renal diseases may be attended by high tension; but it is especially in interstitial nephritis that this condition is found. So important is this fact that thorough and repeated examinations of the urine are called for in all cases of high pulse tension. It is said that when pulse tension is low in case of renal disease, that the prognosis is unusually bad.

The high pulse tension of pregnancy may be due to either of two causes, namely, the presence of effete substances in the blood or to increase in the volume of that fluid. In emphysema it is due to imperfect aeration of the blood.

Next we come to consider the causes leading up to high tension. We find these in the character of the food and drink and habits of the individual. It seems that immoderate indulgence in highly nitrogenized foods, as meats, in connection with too little exercise, and the taking of limited quantities of water are important ætiological factors. This suggests that in the management of these cases we encourage the patient to limit the quantity of nitrogenous food, to drink freely of a pure water and to exercise systematically in the open air. We also forbid the patient alcoholic beverages of all kinds, because they are causes of high arterial tension. Especially harmful are port, sherry and beer.

We may note that constipation exerts a deleterious influence on intra-vascular pressure. The relief following upon a free evacuation of the bowels is often so great as to furnish an important object lesson concerning the value of regularity in going to stool.

High arterial tension has baneful effects. Some of these are mechanical, e.g., the constantly increased pressure ultimately

leads to rupture of blood-vessels, an accident that is very liable to occur because arterial degeneration is usually an associated condition. Increased work is thrown upon the heart in overcoming the capillary resistance. At first that organ may undergo hypertrophy. Later, valvular disease appears, with finally dilatation of the heart. The constant pressure of the contained volume of blood leads to imperfect nutrition of the arterial walls by obliterating the calibre of the vasa vasorum. Thus, degenerative changes of the arterial walls take place.

In my next lecture I shall consider the subjects of low tension, arrhythmia and the changes of the pulse as told by the sphygmograph.

SEBORRHÆIC DERMATITIS—ORIGIN, DIAGNOSIS AND TREATMENT.

BY H. M. DEARBORN, M.D., NEW YORK.

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ECZEMA has been and is still considered the most common as well as the most protean of cutaneous affections. Gradually with the almost continuous advances in the ætiology, pathology and knowledge of the evolution of skin lesions, several types of eruption formerly classed with eczema have been assigned to other more or less known diseases, or given distinctive titles. The affection about to be discussed might easily be described at an early stage as a seborrhœa, and at a latter one as an eczema, but as it possesses particular characteristics of its own, it is best given a distinctive name, especially as it is not an infrequent disease.

It has been *defined* as a condition in which seborrhœa and an eczematous type of inflammation involve the same surface of the skin. Unna first described the disease nearly ten years ago, grouping together some types before classed with seborrhœa, eczema or psoriasis, under the general head of *eczema seborrhoicum*. He argued, from his investigations, that an oily secretion was derived from the sweat glands. This belief was apparently accepted by Piffard, who proposed the name of

sudolorrhœa, and a French dermatologist has described it as *oily hyperidrosis*. More recently the disease has been given the qualifying term of dermatitis, and, inasmuch as the inflammatory process is secondary to the seborrhœa, this seems the more proper name.

The disorder nearly always begins as seborrhœa of the scalp, which may have existed for some time; rarely the starting point may be in the axilla, the genito-crural region, flexures of the elbows and knees, front of the chest, and, still more rarely, on other parts of the trunk or extremities; very exceptionally the distribution may become universal. From the head it may extend to the neck or face. The resemblance which the disease may present to other inflammations of the skin makes it of considerable clinical interest. It has probably been more frequently mistaken for eczema than for any other disease, but it has also been confounded with psoriasis, tinea circinata, lupus erythematosus and the squamous syphilide.

Seborrhœic dermatitis spreads slowly, as a rule, and by peripheral extension. It may remain stationary, however, for a long time, suddenly become active and spread in a uniform way, or more often appear at some new and distant point and pursue an irregular course. The lesions may be few or many, distributed near together or coalesce and form various sizes and shapes.

The *simplest* form presents a more or less diffuse scaliness, the color of the skin remaining normal or slightly reddened. The scales may be abundant enough to form adherent masses, varying in form and consistency with the character of the secretion, from a gray white to a rather soft yellowish brown. This form is little more than a seborrhœa with mild symptoms of irritation, such as itching, burning, etc.

In the *second* degree, superficial macules with sharply-defined borders are seen. They vary in shape, though often round or oval, and in color from a yellowish pink to a deep or brownish red shade. There may be found near by, also, reddish papules, scattered about or aggregated together. In women past the middle period of life it is not uncommon to see a diffuse redness of the whole or part of the scalp, and extending down upon the neck or about the ears, with slightly elevated papular lesions here and there, near the periphery. In such cases

scales usually form rapidly, abundantly and uniformly over the part of the scalp involved.

On non-hairy parts macular and papular lesions may, by peripheral extension and concurrent involution centrally, form circinate, concentric, or, in union with similarly involuting lesions, band-like forms of efflorescence.

Fig. 1 shows two lesions, which, beginning in dime-sized spots, reached the size of a silver dollar in about one year. One of the patches had undergone nearly complete central involution, and exhibited a striking resemblance to ringworm. This patient had been subject to seborrhœa of the scalp for years. Small, reddish macules first appeared in the groins, and later on the legs and arms; in all places persisting and slowly spreading. In the groin the patches were oblong or irregular, and owing to the natural heat and moisture of that region, they were more inflamed and of a brighter red color, but sharply defined and occasionally exuded an oily fluid, which dried in places into slightly adherent crusts. On the patches elsewhere there were small dry scales, nowhere abundant. The patient was cured with *sulphur*, followed by *sepia*, and the maintenance of aseptic cleanliness of the patches.

The formation of scales in cases of the second degree may be scanty or abundant, and exhibit the same character as in the simple variety of the disease. When the scales are dry and whitish, and sparsely distributed over the lesion, there may be a resemblance to the lesions of psoriasis, from which the scales have been partly removed, sometimes termed *seborrhœa psoriasiformis*. So also may the thickly-crusts lesions of similar shape to those of psoriasis closely simulate the latter disease. Several cases of both varieties have come under my observation. Fig. 2 will show the great likeness to psoriasis in shape and location of lesions, but the scales were fatty and yellow, not dry, and pearly white, as in the latter disease.

In other cases the surface of the lesions may be moist from admixture of sebaceous secretion, sweat and serous exudation. Sometimes there is a distinctly catarrhal discharge, which may dry into crusts, thus presenting some of the features of an eczema, *seborrhœa eczemaformis*. Such cases are quite common.

In a *third degree* the inflammatory type of the disease is more pronounced, the skin is more deeply engorged and reddened,

the greasy catarrhal discharge more abundant, and the itching sufficiently marked to induce scratching.

The squamous form of seborrhœic dermatitis is most common, but all degrees of the disease may commingle at the same time, or appear in slow or rapid succession upon the same person.

On the *scalp* the disease may involve the whole surface (most often in women, though my worst case was a male), or be chiefly limited to the vertex or occiput. There is commonly a grayish white desquamation from a pale red and dry skin, *pityriasis capitis*. Sometimes the scales form in masses about the hairs, and when loosened appear as if strung upon individual hairs. The hair itself is lustreless, and after a time becomes thinned out, constituting an *alopecia pityrodes*. Moist lesion may occur on the scalp; they are usually round or oval, sharply defined, yellowish red, and may become crusted over. At the margins of the forehead and occiput the lesions may appear as well-defined curved bands or lines covered with scales or fatty crusts. Over the brow these crusty circlets, "corona seborrhoica," are frequently seen. When the process extends from the scalp downwards, it is most apt to spread down the forehead, temples and back of the neck, where there is produced a distinct redness of the affected surface, partially covered with fatty scales, and occasionally moist lesions appear. The disease not infrequently appears upon the face without immediate extension from the scalp. The middle third of the face is most often affected; sometimes the butterfly distribution is seen, over the nose and outward upon the cheeks. The area of reddened skin is sharply defined; often heavily crusted, especially on and about the nose and eyebrows. Less often other parts may be reddened and greasy, and moist spots may be seen here and there; upon the cheeks yellow or reddish macules with less abundant scales are the most common lesions.

In Fig. 3 may be seen a marked form of the disease simulating *lupus erythematosus* in its characteristic symmetrical distribution over the nose and on to the cheeks. The character of the scales, other lesions in the eye-brows and on the extremities served to exclude the latter disease, though the long duration of twelve years on the face (in varying degree) corresponded with the usual history of lupus. The case proved obstinate

to treatment, but finally yielded to indicated remedies, local cleansing, and a 5 per cent. resorcin ointment.

The back of the *ears* may be affected with the moist or dry forms of the disease, and fissures may complicate the process. If the auditory canal is affected, the meatus may become filled with the fatty accumulations and the hearing impaired. One case of total one-sided deafness from this cause has come under the writer's observation.

The colored border of the *lips* are rarely attacked, and in the two cases I have seen were secondary to the disease elsewhere. The lips affected are uncomfortably dry and stiff from the presence of darkish crusts, which tend to separate and form cracks into the moist denuded surface exposed. When the crusts are removed or shed, the lips very soon become dry and shiny, and the process of crusting is repeated.

In the *axillary* and *genito-crural* regions the disease usually occurs in red macular spots of various sizes, which if confined to those regions show little crusting, owing to the presence of moisture, but if the disease spread away from these regions, as it is apt to do by peripheral curve-like growth, scales and crust form. Thus from the axilla the lesions may extend forward on to the border of the chest, or backward on to the scapular region; or from the inguinal region down upon the thighs and buttocks, over the external genitals and back upon the perinæum. Where two surfaces of affected skin come in contact it may simulate an intertrigo.

On the body the disease begins, as a rule, with small papules tipped with a smaller scale, or as macules more or less covered with scales, on the chest and back the papular form, *seborrhœa papulosa*, is most common. If isolated they spread by peripheral growth, or near together papules may coalesce. In either case a central involution, sometimes including a portion of the circumference of a lesion, together with other lesions, may result in figurate shapes of various degrees. The borders are sharply defined, scaly, and often show raw, exuding points. Thin, fatty scales may nearly always be found on the old portion of the patches. On other parts of the body and on the extremities the disease is of least frequent occurrence, the lesions are more macular in type, round or oval in shape (Fig. 1), and less likely to merge together to form irregular patches. They may be

bright red or have a yellowish hue, with slight scaliness or thickly covered with fatty crusts, about which a reddish border may be seen. Solid papular lesions are sometimes present with the same variations in scaliness or crusting as the macular form. In both forms the crust may cover a moist or a dry base, they may remain roundish, enlarge to coin-like, or change to circinate or irregular shapes. In outline and gross appearance these lesions of the body and extremities may closely resemble those of psoriasis. Differences, however, can always be found.

Between the fingers the disease may exhibit features similar to those seen in the axillæ and groin.

Lastly, it is well to note that seborrhœic dermatitis may co-exist with other cutaneous diseases, such as the syphilides rosacea, sycosis and acne.

Causes and Pathology.—Certain constitutional conditions of the system are said to predispose to seborrhœa, such as gout, chlorosis, struma, alcoholism, syphilis, and forms of debility, especially those following fever and malnutrition; disorders of the digestion, menstruation, constipation, excessive use of tobacco and sedentary habits are also causative factors. The fact, however, that the disease occurs at all ages, and in most cases in persons of good and robust health, indicates that there may be a more direct cause than those enumerated. It is probable that the disease originates primarily from some condition of the system contributing to a peculiar departure in function of the secreting glands of the skin. My own clinical experience leads me to conclude that some of the worst cases originate from abnormal conditions of the perspiration. I think I have seen more cases arise in this way than in any other, particularly some which originated during warm weather. Probably in these cases it was not the excessive perspiration so much as the eliminating of some irritating substance or substances through the perspiratory glands. Many cases, however, apparently develop without any obvious cause. Most of my own cases have been subjects without pronounced constitutional conditions. The over-secretion of sebum is a factor in all cases in the beginning of the disease, and the fact that it sometimes accompanies or follows excessive perspiration would indicate that pathologically, if not normally, the sweat glands secrete an oily substance, as first advanced by Unna. It is not unreasonable

to suppose that on surfaces where sebum and epithelial masses have accumulated to some extent, micro-organisms may find a suitable medium for growth. The disease behaves in many ways like other parasitic affections, and this solution is apparently favored by the method of later development of the lesions. In this connection the investigations of Taenzer are interesting. From a patch of seborrhœic dermatitis this investigator isolated some eighty varieties of bacteria. This is about all that can be said regarding its parasitic nature, and, it is proper to add, that no scientific demonstration of the parasitic nature of seborrhœa or seborrhœic dermatitis has been made.

Pathologically the disease is purely an epidermic one. Normally, sebum is produced by fatty degeneration of the lining epithelium of the sebaceous glands. The changes in the secretion as to quantity, fluidity, etc., with the consequent tendency to decompose and give rise to local irritation, accounts for the milder forms of the disease. In the severe forms there is added to these conditions an inflammation of the glandular and periglandular tissue. This secondary process is therefore to be viewed as a dermatitis, that is, an inflammation due to external agents, such as bacteria and decomposing secretions. In severe forms the derma or subcutaneous tissue may become secondarily infiltrated with serum producing more or less swelling and œdema.

Diagnosis.—The distinctive features of seborrhœic inflammation are its starting first upon the scalp in the great majority of cases; its tendency to spread from thence downward; the greasy nature of the secretions; and when there is congestion or inflammation present, the history of a primary seborrhœa.

Eczema may co-exist with seborrhœa, especially in infantile eczema of the scalp. In eczema, the early presence of ill-defined redness, occurrence of infiltration, a discharge from the skin, darker crusts, and marked sensations of itching, will, as a rule, clearly distinguish that disease. In squamous forms of eczema the scales are not greasy, or as easily detached as in seborrhœic dermatitis.

Psoriasis commonly begins upon the extensor surfaces, and if it extends upward to the head is apt to be most marked on the forehead at the border of the hair. Rarely does the disease develop upon the scalp without some characteristic lesion being

present on the extremities or body. The scales are pearly white and dry, not fatty as in seborrhœa.

Tinea circinata and *tinea tonsurans* may be determined by the microscopical discovery of the parasite. Ringworm of the scalp commonly occurs in circular patches, and generally some broken stumps of hair can be found in the affected area. In both forms of ringworm there is an absence of greasy scales common to seborrhœic disease, and present a probable history of contagion.

Impetigo contagiosa would only be mistaken for seborrhœic crusts after the lesions had become dry. The former is an acute affection, occurring chiefly in children, in the form of discrete vesico-pustules which sometimes coalesce, soon rupture and dry into rather bulky honeycomb-like scabs. Sometimes these are very like seborrhœic lesions about the eye-brows, nose, etc., but it lasts rarely more than two or three weeks, unless kept active by auto-inoculation from neglect, etc.

The *papulo-squamous*, or the crusting stage of a *pustular syphilide* might at first sight resemble the accumulated scales of seborrhœic spots of the scalp and face. The history of the case, giving other evidence of syphilitic infection, such as the primary sore, mucous patches, other forms of syphilide, etc., and the puriform secretion found on removal of the crusts in the pustular form, will establish the nature of the lesions. Unna claims that the two diseases often exist together, and that the seborrhœic process may dominate the objective appearance.

Lupus erythematosus in atypical form may rarely resemble an also atypical seborrhœic dermatitis. Even then the differences are more numerous. The patches of the former are better defined than in the latter; the color is a deeper (violet) red than that seen in most forms of seborrhœic inflammation; the scales are adherent and dry, as compared with the easily detached and greasy sebaceous accumulations of the latter. *Lupus erythematosus* is due to a new growth, and is often followed by scarring, seborrhœic dermatitis in a functional and inflammatory disorder, and on recovery the texture of the skin is unchanged.

Prognosis.—In all except the rare generalized form of seborrhœa, the prognosis is reasonably good. Some are easily cured, others are equally obstinate to treatment. In seborrhœic dermatitis of the scalp, except in infants, it should be borne in mind



FIG. I.—Seborrhœic dermatitis of one year duration, in its evolution simulating ringworm. Cured with *Sepia* and a local antiparasitic application.



FIG. II.—Seborrhœic dermatitis of three years' duration. Generalized eruption over scalp, face, and trunk, resembling psoriasis. Cured with kali sulph. and sulphur.



FIG. III.—Seborrhœic dermatitis of twelve years' duration, simulating lupus erythematosus. Cured with indicated remedies and a local antiparasitic.

that an attendant baldness may be permanent, though sometimes the pilary growth can be partially renewed.

Treatment.—The accumulations of sebum upon the surface of the skin may act as a mechanical irritant, or if decomposed, as a chemical irritant. Therefore, such deposits should be removed by mechanical methods. Gentle frictions with olive oil, sweet almond oil or fresh lard, will loosen the scales, which may then be wiped away; or cleansing with any toilet soap and water will clear the surface, after which it should be quickly dried and very lightly anointed with some non-medicated oil or fat. Some cases of seborrhœic dermatitis undoubtedly become parasitic, and local causal treatment is then indicated. In mild cases alcoholic solutions may be efficient. Green soap may be combined with alcohol in equal proportions, which, after filtration and scenting with some perfume, if desired, may be employed in place of ordinary soap. This should be sponged over the affected part, and then sufficient warm water used to make a free lather; finally washing off with clear water, drying, and anointing as before directed, completes the measure. Brandy or whiskey with ordinary soap may sometimes be substituted for the green soap. In persons with delicate or sensitive skins, mildly alkaline aqueous solutions, such as ammonia, carbonate of potassium, bicarbonate of soda or borax, may be used for cleansing purposes, followed, after washing off and drying, by some mild antiparasitic ointment in place of the non-medicated oil. The following combinations, perfumed if desired, will be found useful in a variety of cases: Calomel in the strength of five to twenty grains to the ounce of fresh lard, or the ammoniated mercury in the same proportions; sulphur one-half to two drachms to the ounce; salicylic acid, resorcin, or beta naphthol, ten to twenty grains to the ounce. In seborrhœal affections of the genitals, umbilicus, and axilla, especially in stout individuals, ointments should be seldom used. Here lotions or dusting powders are better, when any medicated or anti-parasitic applications are needed after cleansing. Of the latter, finely-powdered boric acid, one part to four of starch or talc; powdered salicylic acid, one part to ten of starch; and the compound stearate of zinc, are among the best. All powders should be finely pulverized.

Choice of the foregoing local measures may be made for in-

dividual cases of seborrhœa and seborrhœic dermatitis occurring on the hairy or non-hairy parts. The effects of these applications are almost purely mechanical or anti-parasitic. They act to remove a maintaining cause (the *causa occasionalis* of Hahnemann), and I have never been able to convince myself that they had any other than local effects. They do not remedy an internal condition, but they remove external obstacles to a cure.

Rarely is stimulating (pathogenetic) local treatment required beyond that incident to the medicated applications already named. When needed in obstinate cases to aid in bringing about the functional tone of the skin, the tinctures of pilocarpine, cantharis, capsicum, nux vomica or ergot, incorporated in cold cream or other soft ointment, in the proportion of ten to thirty drops to the ounce; or, still better, in many cases, in lotion of five to twenty drops to one drachm of boro-glyceride and seven drachms of rose water, may be employed. All local applications should be graduated in strength and quality to meet the local needs and the sensitiveness of the skin in each case.

Physiological attention to the whole skin may be important. A daily cold bath invigorates the skin as well as the general system. Rock salt may be added to the water, in the proportion of a half-ounce to an ounce to the gallon, to increase the effect of the bath. Other physiological treatment consists in the correction of habits which may have caused or aggravated the disease, and which were partly named under ætiology. Regulation of diet and exercise, so as to promote healthful nutrition, and the relief of other disorders of the economy which may have had a causal relation to the seborrhœal disturbances, are sometimes essential steps of a cure.

Internal pathogenetic treatment is always important, and, when the constitutional indications are clear and the patient not urgent for quick relief, often the only treatment required.

Case II. was cured with *kali sulph.* and a few intercurrent doses of *sulphur* without any local measures other than the ordinary bath which had been used before as well as after internal medication.

The indications in no two cases are just alike, and the scope of this article does not permit giving the full indications

for drugs even if that were desirable. What is important, in my judgment, is to match the general condition of the patient with the general action of a drug; then, if sensations, aggravations or ameliorations exist, they will frequently be found to tally also. Thus briefly we may review antimonium crud. and graphites.

Antimonium crud. acts chiefly upon the tissues of the skin and mucous membrane; lowers vitality; increases the secretions without producing much inflammation; sweat without odor, general or symmetrical; macerated, inflamed and wrinkled skin from excessive sweating; especially indicated for affections due to excessive sweating or for sweat eruptions on face, neck, back, chest, wrists, etc. If the special indications for antimonium crud., *irritable* disposition and *white* tongue are present, it will nearly always benefit sweat diseases. Aggravations from exercise, warmth and wine, and amelioration from rest and cool air, still further point to its adaptability to these disorders.

Graphites.—This salt so demoralizes nutrition that while it diminishes the general secretions of the skin, menstruation etc., it induces pathological (catarrhal) secretions and exudations in various degrees. It is useful in *very dry conditions* of the skin in thin people and for elderly people who are very liable to skin lesions from slight irritations, and who suffer from general prostration, pulsations, etc.; worse from motion and warmth. When glandular structures of the skin are affected by disease, graphites is credited with effecting great improvement.

Belladonna is sometimes indicated in the early stages of the more acute attacks affecting the scalp and attended with redness, heat and tenderness. Most cases have advanced too far when seen to be controlled by this drug.

Sulphur is probably more often indicated than any other remedy. This drug is such a polychrest that some of its symptoms may be nearly always found, but when a few harmonious symptoms of condition, sensation and aggravation appear, its beneficial action on seborrhœic inflammation is often marvelously rapid. I have seen a number of severe cases cured with this drug alone.

Yellowish or whitish scales may suggest *cicuta*, *kali sulph.*,

kali carb., *nat. mur.*, *phos.*, *thuja*, among drugs as likely to show other complementary symptoms of the disease. The oily secretions may point to such drugs as *baryta carb.*, *cal. carb.*, *plumbum*, *raphanus* and *selenium*; the shape of the patches to *sepia*, etc.; while the angry color and well-defined margins may call to mind *mercury*, *iodine*, *nitric acid*, *carbolic acid*, and others.

Any prominent feature may thus point to a remedy proved to be indicated by further investigation and final verification by cure.

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THE ESSENTIAL PRINCIPLES OF STATE MEDICAL LICENSURE.

MEMBERS OF A TEACHING FACULTY OUGHT NOT TO ACCEPT APPOINTMENTS TO
MEMBERSHIP IN STATE EXAMINING BOARDS—THE MEDICAL LAW
OF THE DISTRICT OF COLUMBIA.

BY H. M. PAINE, M.D., ATLANTA, GA.

(Presented at the Semi-Annual Meeting of the Homœopathic Medical Society of the State of New York, held September 21, 1896.)

(Presented and read also at the Quarterly Meeting of the Albany County Homœopathic Medical Society, held October 20, 1896.)

The Presence of Medical Teachers in the Examining Boards of the District of Columbia.

THE recent enactment by Congress of a new medical law for the District of Columbia, providing for the establishment of governmental control of medical licensure, prompts the presentation of a few suggestions regarding the *membership* of State examining boards, and a statement of the *principles* underlying the application of *tests* of medical scholarship, such as these boards are designed to establish and effectively apply.

Nearly all of the medical laws enacted during the past ten years, for creating State examinations, provide for an entire *separation* of the *teaching* from the *licensing* functions, by expressly prohibiting the appointment of members of a teaching faculty to positions in State examining boards.

In the construction of the medical law for the District of Columbia, however, this salutary safeguard, whereby both pro-

professional and public interests may be more effectively protected, has been wholly disregarded, and, it would appear, intentionally prevented, such a provision having been stricken from the bill previous to its final approval.

As a direct result of such omission, it is found that both the old-school and homœopathic examining boards are *dominated* by members of college faculties.

A Subversion of the Principles of State Medical Licensure.

The question, therefore, is at once raised, and is thrust upon those who are honestly and earnestly endeavoring to establish higher and more nearly uniform standards of medical learning, whether the presence of college men in an examining board is wise, expedient or necessary.

In reply, it may be most emphatically stated, that there can be but *one* answer to this question, viz., that it is unwise, inexpedient, and not only unnecessary, but positively subversive of the essential purposes and principles of State medical licensure, and for sound and substantial reasons.

An Entire Separation of the Teaching From the Licensing Interests. Two Tests of Scholarship to be Applied.

The central principle involved in the establishment of State examinations, is that of effecting a permanent and complete *separation* of the *teaching* from the *licensing* interests, in order that there may be applied *two* tests of medical scholarship instead of *one*.

The first formal protest against the *union* of the *teaching* and the *licensing* interests was made fifty years ago, at the first meeting of the national organization, which was subsequently merged into the American Medical Association. The meeting was held in New York city, in May, 1846, the resolution adopted declaring, "That the *union* of the business of *teaching* and *licensing* is *wrong in principle*, and is liable to great abuse in practice."

And ever since that first expression of antagonism to a *union* of these two functions in one corporate body, the same sentiments, embodying even more vigorous protests, have been many times emphatically repeated and endorsed by State and National medical societies; and at many of these gatherings the system of State control of medical licensure has been re-

peatedly approved and earnestly recommended, because it provides the only *practical* method by which sufficiently high and more nearly uniform standards of medical qualifications can be effectively maintained.

The Work of the Medical Colleges is Educational ; That of the Examining Board is Judicial.

While there is no rivalry or antagonism between the *educational* work of the colleges and the *judicial* functions of the examining boards, there cannot, in any degree, be a blending of the two offices without material impairment.

Their proper functions being entirely distinct and *separate*, one designed to constitute a check upon the other, there cannot be a *union* of the offices of these two bodies, and, at the same time, secure the highest degree of efficiency of each, nor the attainment of a perfected educational system.

It is the part of the examining boards, acting in the capacity of *judges*, to determine whether the work of the faculties of medical colleges has been well done ; hence it is not at all proper, or in any way justifiable, for those who are teachers to accept also membership in examining boards.

The trend of sentiment in all the States in which this reformatory movement has made substantial progress is wholly *against a union* of the teaching and licensing interests.

Dr. W. W. Potter, in his Presidential Address before the National Confederation of Examining Boards, states :

“Not until after four years’ study in a recognized medical college, and the receipt of a diploma therefrom, should a physician become eligible to license by the State, and then only after due examination by its medical examiners, *none of whom should be medical college teachers.*”

Continuing, he reiterated the same sentiment, in connection with a description of the qualifications for practice, in the following words :

“Hence, there are three stages of preparation for medical practice: *first*, a preliminary training that shall at least equal that of a high-school graduate; *second*, four years’ study in a legally incorporated medical college; and, *third*, examination and license by a State board, *none of whose members are teachers in a medical college.*”

College Professors in an Examining Board are Provided with an Opportunity and the Power to Exercise Favoritism.

Teachers who have labored earnestly to bring their classes up to certain required standards, and having indorsed their own work by conferring the doctorate on their own students, would, as members of an examining board, unhesitatingly license such applicants. They could not consistently do otherwise; hence the influence and presence of such teachers in an examining board would necessarily nullify its elevating tendencies, render its reformatory work a farcical performance, and defeat the purposes for which such boards are organized.

Let it be granted that these professors have no ulterior purposes, and let it be admitted, also, that they will always act honestly and impartially, it cannot be denied that their presence in an examining board provides them an *opportunity* and the *power* for the exercise of *favoritism* toward their own students, or the students of any other medical college, whenever their self-interests may prompt them to exercise such power.

The Diploma to be Deprived of its Licensing Functions.

After long and patient investigation of this subject, the conclusion has been arrived at that a complete *separation* of the teaching from the licensing functions can *only* be secured by depriving the diploma of its *licensing* privileges.

For eighty or more years the faculties of medical colleges have been authorized by law to determine and apply such tests of scholarship as, in their judgment, seemed essential, and, on finding students qualified according to standards fixed by themselves, they were empowered to grant a diploma conferring the degree of Doctor of Medicine, such diploma conveying, also, a *license* to practice.

This method, doubtless, had many good qualities, and, for many years, the possession of a *diploma* constituted unquestioned evidence of what was then considered satisfactory medical knowledge.

The Diploma Alone Insufficient Evidence of Satisfactory Medical Knowledge.

In course of time, however, it became painfully apparent

that each medical college, acting independently of every other, established tests of scholarship of its own; hence it was found that there were as many standards as there were colleges, some of them having standards so low as really to admit to practice many students who were grossly illiterate and notoriously incompetent. In fact, the low standards adopted by many medical colleges became a standing disgrace to the American medical profession, and a constant menace to public welfare.

This condition having, in time, become unbearable, the standards for obtaining the degree having fallen so low as no longer to be worthy of recognition as affording even presumptive evidence of satisfactory medical knowledge, efforts at improvement have been repeatedly made, these efforts, for many years, being directed mainly toward securing uniform and concerted action on the part of the colleges themselves.

In a number of States *registration* has been faithfully tried, and, in others, so-called *regulation of the diploma*, that is, the licensing of those physicians *only* who were graduated from colleges requiring at least three years of study and three full courses of medical lectures.

For a time these measures seemed decidedly helpful; a check upon fraud and favoritism seemed to have been established; soon, however, in spite of these safeguards, it was found that numbers of illiterate and unqualified students were continually being foisted upon the profession and the public, and that the standards of medical knowledge were not keeping pace with the general advancement in all other departments of learning.

The reason for this deplorable condition was found in the fact that the faculties of medical colleges being personally benefited by graduating as many students as possible, had, perhaps without being fully aware of it, exercised their legal privileges in such a manner as to promote their own selfish interests to the detriment of those of the profession and the public.

In consideration of these facts, the decision was at length arrived at:

1. That the *diploma* could no longer be depended on as evidence of *possessing requisite medical knowledge*.
2. That when granted, it ought no longer to include the right to *practice*; and

3. That in future it must be superseded by a *license* granted under authority *separate from* and entirely *independent of* the teaching faculties of medical schools—that is, by means of the establishment in each State of *State medical licensure*.

The Essential Principles of State Medical Licensure.

The essential principles of State medical licensure, therefore, are :

1. That the degree of doctor of medicine shall no longer convey the right to practice.

2. The establishment of minimum and as nearly uniform standards of scholarship as is possible.

3. The appointment of State examining and licensing boards ; the nominations to such appointments to be made by representative State medical societies.

4. The complete *separation* of the right to teach and to grant the degree of doctor of medicine from the right to grant a license to practice.

The principle of *separating* the authority to license from the right to teach is not new. The professors in theological schools are never called on to examine, license or ordain their own students. The professors in law schools are never permitted to examine and license the graduates from their institutions. State medical licensure is, therefore, a forward movement to advance the profession of medicine to a standing equal to that held by cognate branches of learning.

State Medical Licensure the Only Barrier to the Advent of Incompetent Practitioners.

This independent system of medical licensure has been established by the profession at large expressly for its own protection and betterment and for more effectively promoting public interests.

This salutary system, as exemplified by the medical laws of the dozen or more States where it has been adopted, constitutes an effective barrier, and at the present time the *only one* to the entrance upon medical practice of numbers of incompetent practitioners, the percentage, as indicated by the results of four years of trial being about *one in eight or ten*. That is to say, State medical licensure has been devised by the profession

for the purpose of detecting fraud and preventing favoritism; and the members of the State examining boards have found, in their limited experience, abundant evidences of both and a complete justification of the actual necessity for the administration of the judicial trusts temporarily committed to their charge.

Dr. W. W. Potter, in the address previously referred to, states: "If the schools in many instances have waited for mandatory laws to raise their standards and increase their years of study, that is because the rank and file of a great profession has risen in its might, and through its constituted State medical societies has demanded laws of the several State legislatures that should advance the cause of higher medical education. The examining boards are merely the servants of the people in this matter, are simply instruments through which their will obtains definite expression."

Having no selfish interests to subserve and no sinister purposes to promote, the members of State examining boards are disinterestedly engaged in a most important and highly desirable work, the practical utility and necessity of which will be even more forcibly demonstrated by the results of accumulated experience.

This system is rapidly furnishing proof the most conclusive of its satisfactory effectiveness; hence it is worthy of and should receive the cordial endorsement and united support of all who have at heart the permanent elevation of approved standards of medical learning. Its reformatory offices will be nullified and its elevating tendencies measurably defeated, however, unless its work and membership are wholly *dissociated* from those of faculties of medical colleges.

The case of a prominent physician of St. Paul is particularly *apropos* in this connection. After several years of effort in behalf of the present Minnesota medical law, he was appointed by the governor to membership in the first examining board. Perceiving, however, the exceeding impropriety of assuming to judge impartially as to the qualifications of students whom he had previously declared qualified by giving them a diploma, he promptly declined to serve on the board.

The foregoing statements are presented in order to call attention to the fact, fully apparent to all who have given the sub-

ject careful thought, that the presence in *any* examining board of college men is entirely out of place and is not in harmony with the principles of State medical licensure. The policy is radically defective, the tendency is retrogressive, and the result in the end will be the defeat of the very purposes aimed at by the establishment of the examining board system.

Resolution adopted at a quarterly meeting of the Albany County Homœopathic Medical Society, held October 20, 1896:

“*Resolved*, That the members of the Albany County Homœopathic Medical Society heartily endorse the sentiments expressed in the paper read by Dr. H. M. Paine, entitled, ‘Members of a Teaching Faculty Ought Not to Accept Appointments to Membership in Examining Boards,’ and recommend its publication and distribution to the profession.”

CAN THE LAW OF SIMILARS BE PROVEN EXPERIMENTALLY?

BY M. W. VAN DENBURG, A.M., M.D., FORT EDWARD, N. Y.

PART III.

SOME ALLOPATHIC WRITERS AND AUTHORS WHO SAW THE LIGHT OF TRUTH,
BUT FAILED TO WALK IN THE LIGHT.

ALFRED STILLÉ, M.D.

HISTORY gives many examples of men who have missed great discoveries by no more than a hair's breadth.

The reasons for this are manifold. Among the more conspicuous are these: It requires a certain breadth of mind, a freedom from bias, and a fearlessness in the search for truth, aside from a genius to perceive it, in order to lead to that broad and just application of facts to theories, which will explain all the important relations subsisting between them.

Copernicus and Galileo were in position to furnish facts and propound theories to explain them; but the bias, the cowardice and the narrow-mindedness of hundreds in their day, who were abundantly able to grasp the facts, kept them from adopting those theories which alone afforded sufficient explanation, and

committed these same pseudo men of science to the ranks of the oppressors and enemies of true progress.

What was true of the times of Galileo and Copernicus is true of all time. In every generation men stand in a position to be leaders of progress, having all the knowledge and all the insight necessary for first steps in discovery and reform—steps which inevitably lead to more light and broader vision; but, moral cowards that they are, they shrink from the labor, the blame, the loss of prestige or the loss of ease that invariably falls to the lot of a reformer.

Such a man was Alfred Stillé. A man whose knowledge of medicine was profound enough, whose perceptions of facts were numerous enough; who surpassed Hahnemann in the number of analogies, all pointing one way; who perceived with equal clearness the road to truth; but who shrank from the application of his own facts and the legitimate results of his own conclusions.

He was the last great writer of the allopathic school, except H. C. Wood, who has had the insight to perceive the trend of medical truth, but both Stillé and Wood have fallen short of the ultimate goal. Both have stumbled, time and again, over the finger-posts that pointed unmistakably to the one and only possible solution of the curative action of medicines.

To appreciate the parallel existing between the writings of the founder of homœopathy and Alfred Stillé, is to wonder how it was possible for Stillé to stop short of fully adopting the conclusions of his great predecessor.

Hahnemann had been dead nearly two decades when the first edition of Stillé's work was published, and more than three decades when Stillé's last edition left the press. It seems strange that ideas which had found full expression in Hahnemann's works fifty years before, should have still been put forward as advanced thought by Stillé. It but emphasizes how much one may lose by restricting inquiry and limiting reading to only approved authorities. The man of free thought and free inquiry, is ready to glean truth from any source; the man of prejudices and partisan bias is as likely to be self-deceived as he is to mislead others.

In the following comparison, which does not, by any means, include all the important parallels, there has been a conscien-

tious effort not to misrepresent Stillé in the least degree. In the parallels which have been given will be found much food for thought by members of all schools of medicine.

The first edition of Stillé was issued in 1860, the fourth and last in 1874. Diligent inquiry among allopathic physicians of three towns discovered only one copy of this work, and also revealed the fact that several bright men of ten years' standing as physicians, had not even heard of it, or had forgotten it. Nevertheless, Stillé gives more of "the physiological action" of drugs than all other allopathic authors taken together. It is, indeed, evident that the later authors have depended upon him for what information they do present in this line.

"Medicines," says Stillé, "are substances used for the cure of diseases. There is no natural difference between a medicine and a poison. All medicines are not poisons, nor is every poison necessarily a medicine. But, with scarcely any exception, substances which, in a single dose, are capable of destroying life, are also, in a certain less amount, adequate to save life. Their deleterious action is only an excess of their salutary action, and generally the former is proportioned to the latter." (Vol. i., p. 18.) He continues: "*Therapeutics* treats of the action of drugs and the uses of medicines in the cure of disease." (*Ib.*)

"It is unwise to expect identical effects from a vegetable alkaloid and from the plant which yields it." (*Ib.*, p. 19.)

"Medicinal substances derive their virtues from active principles, each of which possesses a uniform composition." (*Ib.*)

"They (the alteratives) are very far from possessing identical curative virtues; indeed, it is quite impossible to substitute them for one another." (Vol. ii., p. 735.)

"All noxious agents, and especially drugs, possess the property of producing a particular kind of change in the health of the living organism." (Hahnemann's *Organon*, Sec. 124. See also Secs. 32, 119.)

"Each drug manifests *particular* effects in the human body; and no other drug will produce effects of exactly the same kind." (*Ibid.*, Sec. 118.)

But the ultimate action of drugs is inscrutable. Stillé says, in attempting to account for the action of alteratives: "Such, briefly, are some of the elements out of which we may attempt

to form a judgment respecting the manner in which alteratives cure disease; but their insufficiency is only too palpable. Yet, if we attempt to push the inquiry further, we enter upon a boundless sea of conjecture, where there is little else to guide us than more or less plausible hypotheses." (II., p. 735.)

"It is undeniable that the healing power of drugs, is actually undiscernable in itself." (Hahn., *ib.*, Sec 21. See also Secs. 19, 20.)

The cure of disease must be in accordance with natural law. Stillé says: "If morbid conditions obey a law in their mode of development and decline, the medicines which more or less uniformly modify those processes, *must do so in virtue of an inherent law.* To deny this would be also to deny that the effects of a medicine in disease can be anticipated at all; or that therapeutics is anything but guesswork. If pathological conditions can be ascertained, it can also be determined under what circumstances they are influenced by medicine, so as to terminate in health." (Vol. I., p. 30.)

"The agreement of my own observations of the pure effects of drugs, with those of older authors, as well as the agreement of various other writers among themselves will easily convince one that medicinal substances, in producing morbid changes in the healthy, *act in obedience to fixed and eternal laws of nature*, by virtue of which they are enabled to generate certain definite morbid symptoms; and that each drug produces particular symptoms according to its own peculiarity." (Hahn., *ib.*, Sec. 111.)

But the effects of drugs upon the sick are obscured by the manifestations of the disease itself, and by the tendency to spontaneous cure. "This is one of the most difficult branches of medical inquiry" (how medicines cure disease); "for it is sometimes quite impossible to distinguish between the symptoms of a disease and the effects of a medicine." (Stillé, Vol. i., p. 28.)

"Clinical observation of the effects of medicines is in itself extremely difficult, and is moreover liable to many errors; so that its results must be accepted with extreme reserve." (*Ib.*, p. 27.)

"When medicines are administered to the sick, it is difficult and often impossible to distinguish between the certain effects produced directly by the remedy, and those which result from the spontaneous course of the disease." (*Ib.*, p. 80.)

"If for the purpose of investigation, drugs are given only to sick persons, even if these drugs are administered singly and in simple forms, little or nothing of a definite kind will be seen of their pure effects; because the changes of health which these drugs may actually be expected to produce, will be mingled with the symptoms of the natural disease so as rarely to become distinctly visible." (Hahn., *ib.*, Sec. 107. See also Sec's. 106, 142.)

The action of drugs on the healthy human being is the only safe means whereby to judge of their genuine effects.

"*The action of medicines upon the sound organism of man and the lower animals forms an indispensable key to their curative operation in disease. The more thoroughly it is known, the more intelligible must become the mode in which medicines bring about the restoration of soundness of structure and function, and the more will the isolated facts of therapeutics tend to arrange themselves in a systematic form.*" (Stillé, i., p. 9).

"We cannot impress too strongly upon the mind the fundamental truth, that direct observation of the effects of medicines is the only possible foundation of therapeutics; for recognizing it clearly and following it reverently, we shall be content, by careful, prolonged, direct and comparative experiment and observation, to arrive at those practical conclusions which do not form the doctrines of a day, or of a sect, but of all time and of the whole medical world.

"If a direct analysis of *clinical observation* proves it to be the essential ground of therapeutical doctrines and precepts, an estimate of the value of experiments upon the healthy organism in man and the lower animals only strengthens the conclusion. The more extensively and accurately such experiments have been performed, the more evident does it become, that the conclusions to be drawn from them can never serve as therapeutical rules, whatever light they may throw upon the manner in which particular medicines act upon the economy, and thereby furnish us with most valuable information respecting the limits of their power for good and evil."

"The uniform action of a medicine upon healthy structure or function is its physiological operation; its curative action upon diseased structure or function is its therapeutical operation. To determine the former seems comparatively easy, for, as com-

pared with the abnormal, the normal action of the system may be viewed as constant and uniform. But in the abnormal case we are required to estimate the influence of an agent upon functional and structural conditions, with the natural termination and tendencies of which we are only imperfectly or not at all acquainted. Whatever else they may do, experiments upon the healthy organism can never fully reveal the manner in which medicines cure disease, because in disease elements are involved which do not exist in health."

"But if we are ever to acquire a distinct idea of the curative operations of medicines, that is, of their operation upon tissues, organs and functions, when these have departed from the normal condition, we must possess a standard with which to compare the effects that medicines produce; AND NO OTHER STANDARD IS AVAILABLE THAN THE OPERATION OF THE SAME MEDICINES UPON THE HEALTHY ECONOMY." (Stillé, vol. i., p. 32-33.)

"In conclusion, while we desire to impress upon the reader that THE SCIENTIFIC PHYSICIAN SHOULD, FIRST OF ALL, ACQUAINT HIMSELF WITH THE ACTION OF MEDICINES UPON THE HEALTHY ORGANS, *and, next*, SHOULD LEARN THEIR COMPARATIVE ACTION UPON THE SAME ORGANS IN DISEASE, yet it cannot be too often repeated that simple experience forms the only crucible in which a therapeutical fact or doctrine can be fairly tried. Whatever sustains this test may be accepted as a real and permanent addition to our therapeutical resources. But the results of experiments upon the healthy organism cannot possibly attain to such importance; they can only illustrate the manner in which medicines cure disease as physiology illustrates the phenomena which constitutes disease." (*Ib.*, p. 38. See also pp. 33 to 38.)

"It is then undeniable that the healing property of drugs is actually undiscernible in itself, and that even the purest experiments, conducted by the most acute observer, fail to reveal any peculiarities of drugs marking them at once as medicines. It is only possible to recognize the power of drugs to produce distinct changes in the human body, particularly the healthy human body, and to excite numerous definite morbid symptoms in the same; and it follows that drugs exercise their curative power only by virtue of their faculty of altering bodily feelings and states through their power to produce peculiar symptoms.

"Consequently, those morbid disturbances called forth by drugs in the healthy body must be accepted as the only possible revelation of their inherent power to cure disease.

"Through them alone we are able to discover the capacity of producing disease, and hence the capacity of curing disease possessed by each individual drug." (Hahn., *ibid.*, Sec. 21.)

"*The entire range of the disease-producing power of each drug must be known*, that is, all the changes of health which each drug is capable of producing by itself in healthy persons, before we may hope to select the true (homœopathic) remedy for the natural disease." (*Ib.*, Sec. 106.)

"I was the first to pursue this course *with perseverance*, prompted and supported by perfect conviction of the great and beneficent truth, that human diseases can only be cured with certainty by means of the (homœopathic) administration of (similar) medicines." (*Ib.*, Sec. 109.)

"A large amount of information respecting the operation of medicines is to be derived from the study of cases in which excessive doses have been taken by mistake or with criminal intent.

"These display the operation of drugs in magnified portions, as it were, and frequently reveal the alterations of structure which they tend to produce.

"They also serve better than the therapeutical action for comparison with the effects of the same drugs upon animals." (Stillé, i., p. 36.)

"Next: I observe that the morbid or toxic properties of drugs, hitherto mentioned by authors as the effects of large quantities taken by mistake or for criminal purposes, coincide well with my own observations with the same substances upon myself and others. None of these observers suspected that the symptoms reported pointed distinctly to their medicinal power of extinguishing similar symptoms arising from natural diseases. None ever perceived that the disease-producing power of drugs could be made available (homœopathically) in the cure of diseases. It was never suspected that such reports of drug diseases would form the first rudiments of a true and pure science of materia medica." (Hahn., *ib.*, Sec. 110.)

Stillé, in common with a historic line who preceded him, noted the peculiar effects of certain drugs, which seemed to

cure disease by a method different from most medicines. He classes them under tonics, alteratives and specifics, and frequently alludes to them.

“Between the two extreme classes, viz., those which nature alone (unassisted) is competent to cure, and those in which neither nature nor art avails to avert death, there is a middle class in which the skill of the physician and the power of his art are chiefly manifested. On some such affections appropriate remedies exert *an unexplained and, as it is called, specific virtue*; in others, the disordered function or altered structure can be restored to a healthy condition by means of medicines which possess a definite and intelligible mode of action.” (Vol. i., p. 27.)

“There are several (specific remedies) which do exert a curative virtue ‘without the assistance of a known quality’ to explain their cures. These are mercury in syphilis, cinchona in ague, iodine in goitre, and colchicum in gout; *which are capable of curing without the intervention of any evident modification either of structure or function.*

“At the same time as we are wholly and absolutely ignorant of their mode of cure, and almost, or quite, as ignorant of the nature of the diseases to which they are antidotes; *it is not impossible that in the progress of discovery, the unknown elements may be disclosed, AND THAT WE SHALL FIND THESE MEDICINES ILLUSTRATING SOME OF THE LAWS UNDER WHICH REMEDIES IN GENERAL OPERATE.*” (*Ib.*, p. 81.)

“*Alterative medicines act to a great degree in the same direction as the disease which they cure; mercury, for example, tends to produce lesions which bear a close resemblance to, if indeed they are not identical with, those caused by syphilis.*” (Stillé, vol. ii., p. 736.)

“Alteratives are medicines which *in appropriate doses modify the nutrition of the body, without producing any antecedent phenomena.* No other division of the materia medica contains more substances, *which in large quantities may become mischievous to the organization of the body, and even destructive to its life; yet when duly administered, they silently penetrate into the most covert recesses of the diseased organism, and bring about such changes in its nutrition, or in the condition of its ultimate particles, as may result in their renovation and the return to health.*” (*Ib.*, p. 733.)

"It is even more important in its relation to the present question (the nature of the action of tonics), to bear in mind that *when these medicines are administered to persons in full health, they are very far from augmenting the vigor of the system generally, or of the organs of digestion.*

"They impair the appetite, derange the functions of the stomach and bowels, coat the tongue, excite headache, and, IN FACT, ENGENDER THE VERY CONDITIONS WHICH UNDER DIFFERENT CIRCUMSTANCES THEY ARE ADAPTED TO CURE." (Vol. i., p. 449.)

"To say that opium is a specific for bilious colic or cholera morbus, or that alcohol is a specific for delirium tremens, merely signifies that generally these medicines are curative of the diseases named; but, by no means, so constantly as in the case of *true specifics*, and also that they (opium and alcohol), cure by virtue of properties which they manifest under all circumstances in which they are employed; they fall under a general therapeutic law; whereas *the curative operation of every one of the four specifics mentioned, has no evident relation to the effects which it produces upon healthy structure or function.*" (Stillé, vol. i., p. 82.)

"A drug, completely tested with regard to its power of altering human health, and *whose symptoms (functional and structural) present the greatest degree of similitude with the totality of symptoms (functional and structural) of a given natural disease*, will be the most suitable and reliable (homœopathic) remedy for that disease, for which a specific curative agent will have been (thus far) discovered." (Hahn., S. 147.)

If a suitable (homœopathic) drug is properly selected and applied in this way, a natural acute disease of recent origin, even if severe and painful, will gently vanish in a few hours; an affection of somewhat older date will disappear in a few days, together with every trace of discomfort, while little or no effect of the drug will be perceived, and recovery progresses in rapid though imperceptible stages to the full restoration of health.

"Old, and particularly complicated diseases, demand a greater proportion of time to be cured." (*Ib.*, S. 149.)

"Now, if the antitype, constructed out of the most suitable medicine, consists of prominent, uncommon, and characteristic symptoms (functional and organic), *equal in number and similitude* to the diseases to be cured, this medicine will prove to be the most (homœopathic and) specific remedy for the case." (*Ib.*, S. 154.)

The great and truly wonderful thing about homœopathy is, that it has discovered *how to render every drug a tonic and specific remedy*. By following the *plain indications laid down by Stillé* in describing the action and relation manifested in the use of tonic, alterative, and specific medicines, all remedies have been brought into these three classes.

As to the *final tests of the value* of any course of treatment, Stillé and Hahnemann are not at odds.

“To experience, then, we must turn, as the ultimate and decisive arbiter of all questions respecting the curative virtues of medicine.” (Stillé, vol. i., p. x.)

“Experience is really, as well as rationally, the only ground upon which curative effects can be expected from medicines.” (*Ib.*, p. 20.)

“The first step of the empirical process is to collect individual facts, and arrange them according to their likeness or unlikeness; *then to add to these facts by experiment, and thus ultimately arrive at empirical laws*. Such laws form the principles of therapeutics. They rest upon a wider basis of experience than it is possible for any individual to possess, and in no other respect differ from the conclusions drawn by a single mind, from direct personal observation.” (*Ib.*, p. 22.)

“No process of argument ever invented can establish a reasonable presumption that a medicine will be of service, until its qualities have been tested by its actual administration to the sick.” (*Ib.*, p. 32.)

“*Actual experience, the only infallible oracle of medical art*, teaches, in every carefully conducted experiment, that the drug which has proven in its effects upon healthy persons to produce the greatest number of symptoms (functional and organic) similar to those found in the case of disease to be cured, will rapidly, thoroughly and permanently cancel and turn into health the totality of symptoms (functional and organic) of the present case of disease.

“Experience also teaches, that all drugs will unexceptionally cure those diseases whose symptoms are as similar as possible to those produced by the drugs upon the healthy organism.” (*Hahn.*, Sec. 25.)

Finally, in reviewing the parallels above given, which, though of the most practical importance, are nevertheless far from be-

ing all that might be drawn,* we shall find that both writers substantially agree :

That each drug produces *certain peculiar and uniform morbid effects* ; and exerts certain peculiar individual effects in curing diseases. (M. S., pp. 5 and 6).

They also agree that these *curative effects must result according to an inherent natural law*.

They agree, that it is often quite impossible to distinguish between the effects of the medicines and of the disease on the one hand, or the tendency to spontaneous cure and the curative effects of the medicine on the other.

Both agree, that *the action of drugs upon the sound organism of man* (and Stillé says, also the lower animals, though he expresses doubt of the latter) *forms an indispensable key to their curative operation in disease*.

Stillé says these things as forcibly as does Hahnemann ; but he contradicts himself, and then again admits the proposition with all the force of a definite conviction. This certainly is a most extraordinary procedure.

He declares without reserve that : “ If we are ever to acquire a distinct idea of the curative operations of medicines, we must have some standard by which to measure their effects ; and that no other standard is available, than the operation of the same medicines upon the healthy organism.”

Then he persists, “ that the experiments upon the healthy organism cannot possibly attain to such importance as empirical methods.”

“ Nevertheless, the scientific physician should first of all acquaint himself with the action of medicines upon the healthy organism, and next should learn *their comparative action* upon the same organs in disease.”

* Stillé points out as closely as does Hahnemann :

1. That no one healthy person will exhibit all the effects of a drug at one proving.
2. That sex, age, condition and occupation tend to modify drug-action.
3. That very few actually healthy persons can be found upon whom drugs may be tested.
4. That idiosyncrasy plays a very important part in testing drug-effects.
5. That only many and repeated provings will show the reliable drug effects : and
6. That effects are modified by dose, repetition of dose, etc. (Stillé, Vol. i., pp. 33, etc. ; 79, etc.).

We instinctively hold our homœopathic breath, and turn to the body of his work to find such comparisons. We do not find them in a single instance.

Stillé is as clear in the enunciation of the homœopathic method as was ever Hahnemann to the end of his days. What did Stillé find out, upon making these same comparisons? There is no evidence in his work that he ever made them. What would have been the result if he had done so? *He would have written a homœopathic materia medica!* But he had more than one reason to lead him to make a comparison of the series of drug-effects upon the healthy, with the series of effects of the same drugs upon the sick.

Let us note carefully some of the incentives Stillé had to make in these comparisons. He finds "the specific mercury cures the same, or the identical lesion in syphilis, that mercury causes when taken a long time, until its toxic effects are manifested." And he finds this cure is not only inexplicable, *but is also the most satisfactory cure in kind known to medicine.* He finds that, "those alteratives which in large doses are most mischievous and even destructive to life itself, when duly administered bring about a renovation of the system and a return to health." He finds that, "tonics, when administered to the healthy, *engender the very conditions* which, under different circumstances, they are adapted to cure." What are these different circumstances? When the natural disease (the sickness) is most similar to the morbid effects upon the healthy of these same tonic medicines!

Truly, if Hahnemann, with the grasp and insight of a genius for observation and investigation, could infer the law of cure by similars from experiments with a single drug, cinchona, Stillé, with these many examples—mercury, alteratives and tonics—must have been mentally blind, or wilfully blind, not to have reached the same conclusion. Which was it that moved him, incapacity or downright insincerity?

Doubtless it was both. He had a deadly spleen against homœopathy, concerning which he could not say too much by the way of innuendo and abuse. Again, he was intolerant of new ideas when advanced by others. Straws show which way the wind blows, and here is one of them.

In speaking of *hydrastis canadensis*, which evidently had

not then attained to the position it now holds in allopathic materia medica, he says: "The allegation that it is also aperient and cholagogue, diuretic and alterative, with a special operation upon the mucous membranes, not only of the intestine but of the genital organs of the male and female and upon the urinary apparatus, *could only have originated with persons ignorant alike of the laws which govern the actions of medicines and of the nature of disease.* If we add to the heterogeneous conditions, which are claimed to illustrate its virtues as an internal medicine, that its decoction is said to be efficacious as a topical application in ophthalmia, ulcers, etc., we shall probably be persuaded that it must deserve a place in the materia medica which no other drug possesses, or that the qualities ascribed to it are for the most part illusory." (Vol. i., pp. 554, etc.)

It so happens that all these qualities and properties are not considered at all illusory to-day; but every one of them has good standing in received allopathic materia medica.

The man who would hazard such a sweeping observation and impugn so seriously the standing of those who recommend a new remedy, the claims of which he himself had neither proved nor disproved, is not made of the stuff that constitutes scientific discoverers. To prejudge a matter is to destroy all hope of discovering new truth, or of becoming a scientific seeker after truth.

Stillé had prejudged homœopathy and pronounced it false, and a sham.* All his studies, observations and deductions based upon the most satisfactory application of drugs, led towards establishing the truth of homœopathy. All the logic of his facts led that way. But he would not be led. He could not be persuaded. He had made up his mind not to be convinced, not to see or acknowledge the logical results of his premises.

Whoever loves subterfuge, becomes the hopeless bondman

* "It was a distorted and exaggerated perception of the principle of substitution in the cure of disease that led Hahnemann to adopt it as an exclusive dogma, and to link with it another, the doctrine of infinitesimal doses, with which it has no natural or logical connection, and finally to burden those with the weight of a third article of faith, the hypothesis of 'psora,' which marks the anticlimax of an ill-regulated mind in its natural descent from the impossible to the absurd." (Stillé, Vol. i., p. 256.)

of deception. Stillé had the opportunity to become a Moses; he preferred bondage.

The allopathic profession has almost completed the final decade of its forty years' wandering in the wilderness of empiricism, since Stillé clearly announced "the indispensable key to the curative operation of drugs in disease," and declared to the world, that "no other standard was available."

He proclaimed the fundamental rule of homœopathic methods of investigating drugs in the clearest and most unequivocal terms: "The scientific physician should first of all acquaint himself with THE ACTION OF MEDICINES UPON THE HEALTHY ORGANS, AND, NEXT, SHOULD LEARN THEIR COMPARATIVE ACTION UPON THE SAME ORGANS IN DISEASE."

Had the therapeutic investigators of allopathy begun thirty years ago to follow this advice to the letter, to-day there would not be one among them who would not clearly recognize that a drug cures most safely, surely and quickly when administered in proper amounts for those diseases *most closely simulating the effects of the same drug upon the healthy human organism.*

In another paper it will be shown that Stillé is not the only prophet who has arisen in the empirical school, and failed to apprehend the scope of his utterances.

A CONTRIBUTION TO THE THERAPEUTICS OF DIABETES MELLITUS.

BY CLIFFORD MITCHELL, M.D., CHICAGO.

DIABETES is certainly one of the most elusive maladies from a therapeutic standpoint with which we have to deal. I have often been struck by the fact that in treating it every man seems to work best with his own tools—that is, one will cure his cases with arsenic, another with codeine, another with uranium, and another with jumbul; yet when I try any or all of these I cure nobody with them. It is possible, therefore, that others who try the treatment, which has recently been so successful in my own hands, will think me untrustworthy or mistaken. Certain things have happened lately, however, which have emboldened me to make public the experience I have

had, and to suggest that the profession bear in mind, at least, what I say, even if it does not wholly believe me.

It is possible that in treating a disorder, the pathology of which we know so little, we have strained at gnats and swallowed camels. That in ransacking the wilds of Africa and the jungles of India for all sorts and conditions of drugs to influence a disease, the nature of which we know so little, we may have overlooked nearer and simpler agents which are equally effective or possibly more potent.

What are the remedies vaunted as cures for diabetes mellitus? Nearly everything from acetic acid to zinc; but particularly arsenic, creasote, phosphoric acid, uranium nitrate, lithia, jumbul seeds, bromides, especially bromide of arsenic, codeine, ergot, strychnine, salicylates, benzosol.

Now, in many instances, a practitioner has here and there apparently cured one, or perhaps two, cases with one, or perhaps two, drugs in the above list. A man in general practice will not average more than a score of cases of diabetes in a lifetime. Some physicians see no cases at all in half a dozen years. But the specialist, who is on the rack with eight or ten cases at a time, has ample opportunity to test the inefficiency of the shop-worn drugs we hear so much about.

After much experience in treating diabetes mellitus, several practitioners of both schools have confessed to me that drugs in their hands were of little avail. Diet has proved far more reliable when tried on a *number* of patients—that is, the average results from diet have been more striking than the average results from drugs, though in certain single cases a certain drug has apparently cured the patient; but even then diet has been at least a factor in the case.

On the other hand, diet is certainly useless and possibly harmful in individual cases, unless managed with the utmost care. There is reason to believe that, carried beyond a certain point, diabetic diet weakens the patient. Of late, much contradictory testimony in regard to diet has appeared in the journals. Moreover, I have seen cases in which sugar actually increased in the urine on the strictest known diabetic diet.

Nevertheless, up to 1894, I had obtained the best results in the majority of cases by use of the diet described in my book on diseases of the kidneys, page 382. In several cases I could

reduce the urine 50 per cent. in daily volume by means of it in three or four weeks' time. Stubborn cases were unaffected by it, and even by the strict diet (meat, eggs, cheese, gelatine).

In that year (1894) an unpretentious circular announcing the merits of a certain Wisconsin mineral water, from near Green Bay, was mailed me. I filed it away and soon forgot all about it, to say nothing of several dozen others! But not long afterwards a physician consulted me whose first case of diabetes was himself. He had tried drugs and diet, and was now worse than ever. Sugar was 4 per cent. in his urine, and he was numb in both legs and arms, could walk with difficulty. He announced his intention to try the mineral water in question. I agreed to examine his urine from time to time, in order to convince him that he was wasting time and risking his life! I had the pleasure, however, to see the urine gradually lessen in quantity, the specific gravity diminish, sugar decrease, until finally, on some days, the latter was either absent altogether or present in traces only. He ate buckwheat cakes with maple syrup during the process, and they seemed to do him no harm. Finally, when he felt much better, he was more careful about his diet, and the sugar disappeared entirely. He was so much better in all respects that he went home and began practice again. When he came to Chicago he was quite unable to work.

Thinking that rest and change had effected the cure, I paid no more attention to the mineral water until another patient turned up, whose urine contained even more sugar than in the case of the one just described. He was put on the same mineral water by his attending physician, and cured, so far as could be demonstrated, in less than a year. Inasmuch as rest and change played no part in this case, I thought it worth while to try the water on a desperate case, which was floating about from one clinic to another, and finally came into my hands. This patient was a man utterly unable to work. After three months of treatment with the water he became able to work on half-time and left my care.

However skeptical, I could hardly close my eyes to the results thus obtained. I tried the water on a number of patients with more or less benefit, and wrote a paper about it, which was read at Omaha. In this paper I took the ground that the

water was worthy of trial, and was curious to know whether other physicians would get as good results as I did.

Since that time I have had a number of grateful letters, the first in my experience in treating diabetes. "I am better than in years," writes one man. "It has been a God-send," says another. "A thousand thanks," says a third.

In three cases no results to speak of were obtained; but in two out of the three either fair or thorough trial was wanting. In the third case, a woman, after three months' thorough trial, nothing has been helped except the thirst. Nevertheless, one of the "cured" cases derived no benefit until after nearly a year of use of the water.

Two of the most striking instances of immediate relief or cure have occurred within the last month or two. Dr. B. F. Bailey, of Lincoln, Neb., has used it lately in a typical case of diabetes mellitus, with hunger, thirst, polyuria and abundance of sugar, and reports to me that the patient is already virtually cured. Finally, on September 30, 1896, I prescribed it to a patient who was passing 94 ounces of urine, of specific gravity 1024, containing three per cent. of sugar, or 1410 grains, in 24 hours. November 7th the urine came to me in the following condition: Quantity, 49 fluidounces; specific gravity, 1016; sugar, none. This in about five weeks' time! The patient reports a marked change for the better in all subjective symptoms. Careful dieting was observed by him in connection with the treatment.

Inasmuch as several of the patients who have been helped or cured by the treatment had resisted the action of familiar drugs as jumbul, arsenic, lithia, or codeine, I ask the question: Is it a discovery in the therapeutics of diabetes?

INTERSCAPULO-THORACIC AMPUTATION.

BY WILLIAM BISHOP, M.D., NEW YORK.

(Read before the Homœopathic Medical Society of the State of New York.)

It seldom happens that a condition, whether the result of disease or from trauma, arises which warrants an interscapulo-thoracic amputation. When the literature of this subject is in-

investigated it is noticed that an American surgeon, George McClelland, of Philadelphia, was one of the earliest operators.

He made this operation in 1838, and few of his countrymen have followed his example. The operation may be indicated in two conditions, namely: where extensive injury has affected the arm and shoulder, and where a tumor or disease has involved the scapula, clavicle and arm. Sarcomatous growths are found frequently here, but cases have been reported where the tumors were found to be either chondromata or osteosarcomata. It is a fact of no small interest that the percentage of recoveries is astonishingly large. Out of fifty cases which were operated, some for disease and some for injury, only 25 per cent. died as the result of the operation.

In many cases where the operation was performed to remove a sarcoma, the records in some instances state that the patient died a year or two later from recurrence. Statistics of all amputations gathered from the leading hospitals of New York, from 1884 to 1894, show that the mortality is about 15 per cent. When these figures are compared it is astonishing to think that an amputation which necessitates the ligation of the subclavian vein and artery, the removal of the entire scapula, two-thirds of the clavicle and the arm, can yield such good results. Treves has performed this operation for "big arm" in cancer of the breast, and it seems very rational that this operation could be made oftener to relieve some of these exceedingly distressing cases of advanced carcinoma of the breast. The operation by Ralph Cummings in 1808 has been changed and modified, and the method suggested by Paul Berger is now universally adopted.

Some of the early operators disarticulated the humerus first and removed the scapula and a portion of the clavicle afterward; others left portions of the scapula in place; others did not ligate the subclavian artery in the beginning of the operation.

The advantages of Berger's method may be stated as follows:

1. Excessive bleeding is prevented by the preliminary ligation of the subclavian artery, and the entrance of air into the subclavian vein is also prevented by the preliminary ligation of this vein.

2. Any diseased tissue which is in close relation to the

scapula, clavicle or humerus is easily removed with the extremity.

3. Good flaps are easily obtained by removing the entire scapula.

Berger's Method.—An incision is first made along the clavicle from the external border of the sterno-mastoid muscle to the acromio-clavicular articulation. The periosteum is carefully dissected from the clavicle, and the clavicle is divided at the inner extremity of the wound. The middle portion of the clavicle should be removed, after it has been again sawed through at the junction of the middle and outer thirds. The subclavian artery and vein should now be ligated in their third surgical division, and double ligatures should be used. The arm is now drawn away from the body by an assistant, and an incision should be commenced at the middle of the clavicular incision, curved downward and outward along the deltoid muscle across the lower margin of the pectoralis major and teres minor, and continued transversely along the axillary surface of the arm, and while the arm is raised, be continued downward and inward to the posterior surface of the inferior angle of the scapula. This flap should now be dissected up, the brachial plexus divided and the axilla freely exposed. The arm should be carried across the chest and an incision made from the outer end of the original clavicular incision over the spine of the scapula, to the termination of the anterior flap, at the inferior angle of the scapula. This flap should be dissected up and all muscular attachments severed. The limb may be moved by an assistant so as to greatly facilitate this dissection.

Garry; æt. 52; a German; was admitted into Flower Hospital July 31, 1896, suffering with necrosis of the scapula, acromion and of clavicle, and extensive disease of the soft tissue in the region of the shoulder. The shoulder-joint was entirely honeycombed with sinuses, and there were no less than eight openings which exuded pus in great quantity. The joint was nearly useless, and necrosed bone could be detected by passing a probe into any one of the openings. The patient gives the following history:

Father and mother both lived to good old age, and the patient says he has never been ill before in his life. In 1893 he fell, or was thrown down, and struck his left shoulder on the pave-

ment. He suffered some pain from this fall, and complained of cramps in his hand, but at the end of two days he was again able to go to work. He remained well until eighteen months ago, when he was hurled against a heavy piece of machinery. His arm was extended at the time, and the hand firmly held on to the moving shaft until his body struck the above-mentioned obstacle. From this time on he was unable to do any work, and the shoulder became very painful, and at the end of three weeks a large abscess developed in the axilla, which was lanced, but which always remained open. In a short time smaller abscesses appeared and opened spontaneously. These openings were over the outer end of the clavicle, the spine of the scapula on the anterior and posterior surfaces of the head of the humerus. Two operations, the last one in January, 1896, were made upon him before he entered the Flower Hospital. The nature of these operations is unknown, but probably consisted simply in joining two or more of the sinuses together and irrigating the diseased surfaces. His general health was poor, he was emaciated and very weak from the long continued discharge and from the constant pain he had to endure. In this case the great danger (shock) in the operation was prevented, I believe, by the free stimulation with whiskey for two days before the operation. The operation was performed on August 6, 1896, and in the way of preparation he received on August 4th and 5th three strong milk punches, and on August 6th, the day of the operation, he was given one ounce of whiskey every two hours up to 1 o'clock. When he reached the operating-room he was perceptibly under the influence of liquor. The operation consumed about one hour, and Berger's method, as detailed above, was followed closely. Good flaps were obtained, and the wound was packed with moist bichloride gauze, 1-2000, and secondary sutures were placed at the end of forty-eight hours. He undoubtedly was constitutionally affected by the poison in the gauze, but all symptoms of poisoning, viz., diarrhœa, tenesmus, pain in abdomen, salivation, promptly disappeared after the gauze was removed. He improved steadily, showed no sign of shock, his temperature was only 101° the first night, and never went over 100° after the second day. An intermittent pulse caused some anxiety on the third day, but the irregularity disappeared after the administration of a few

Age.	Sex.	Year.	Operator.	Disease or Injury.	Parts Removed.	Result.	Report.
1	M.	1808	Cummings	Gunshot injury.	Arm, scap., part clav.	Recovery.	Gies No. 1, Dent. Zeitch. J. Chir., 12, 1880, 562.
2	M.	1811	Jarry	Gunshot injury.	"	Recovery.	Gies No. 111.
3	M.	1820	Caccamo Bay	Injury by explosion.	"	Recovery.	Bost. M. & S. Jour., 1842, 26, 338.
4	M.	1823	Crosby (U. S.)	Osteo-sarcoma.	"	Recovery, recurred 4 years later.	Bost. M. Jour., 1869, viii., 435, No. 12.
5	M.	1826	Crosby (U. S.)	Chondroma.	"	Recovery, died 2 yrs. 4 mos. later.	Gies, No. 5.
6	M.	1826	Turrell (U. S.)	Malignant disease.	"	Recovery, died 4 mos. later.	Gies, No. 5.
7	M.	1828	McClellan	Encephaloma.	"	Recovery, died 6 mos. later, recurred.	N. Y. M. Jour., 1869, viii., 435, No. 16.
8	M.	1828	Mussey	Osteo cancer (sarcoma).	1/2 clav.	Recovery.	N. Y. M. Jour., No. 17.
9	M.	1835	Prinzel	Crushing of shoulder.	2 in clav.	Died, pulmonary hemorrhage.	N. Y. M. Jour., No. 22.
10	M.	1836	Parise	M. injury.	part clav.	Recovery.	Adelmann in de Juhl, Hulk, 144, 1879, 11, 36, No. 13.
11	M.	1836	Parise	Injury.	part clav.	Recovery.	Berger, 15.
12	M.	1837	Wishaw	Encephaloid.	part clav.	Death 12th day.	Berger, 46.
13	M.	1863	Syme	Cystic fibro-cartil., tumor recurred.	"	Recovery.	Adelmann, 36.
14	M.	1867	Fergusson	Osteo cancer.	"	Recovery.	Walder Deutsch Zeitch. chir., 14, 1880, 308, No. 10.
15	M.	1867	McLeod	Chondroma.	"	Died from shock 3d day.	N. Y. M. Jour., 1869, viii., 435, No. 61.
16	M.	1839	Thiersch	Chondroma.	"	Died.	N. Y. M. Jour., 1870, xii., p. 572.
17	M.	1839	Watson	M. injury (ant.)	"	Died.	Walder, 15.
18	M.	1873	Jessop	M. injury	remains clav.	Died.	Adelmann, 46.
19	M.	1873	V. Langenbeck	Sarcoma.	scap.	Recovery.	Berger, 30.
20	M.	1873	Parise	Osteo sarcoma.	2	Recovery.	Adelmann, 55.
21	M.	1887	Gundrum	Gunshot injury.	part	Died 5 day from sub-clav.	Berger, 10.
22	F.	1878	Macanabara	Osteo sarcoma.	1/3	Recovery, dead 18 months later.	Gies, 21.
23	M.	1879	Lund & Edward.	Spindle-celled sarcoma.	"	Died next day.	Laurel, 1878, 629.
24	F.	1882	MacCall	Tumor of scap. antist.	"	Recovery.	Brit. Med. Jour., 1880, 2, 617.
25	M.	1882	Berger	Enchondroma.	"	Recovery, death 16th day.	Berger, 15.
26	M.	1883	Vernon	Osteo sarcoma.	Sc. in 2 parts, clav.	Recovery, recurrence.	Berger, 18.
27	M.	1884	Czerny	Spindle-celled sarcoma.	Arm cap., purb.	Recovery, death same year.	Boll. Archivio per klin chir., 1888, 37, 144.
28	M.	1884	Lewis	Injury, comp. frac.	Sc. puriarm clav. (all).	Recovery.	Berger, 41.
29	M.	1884	Lucas	Injury by machine.	"	Died.	Revue de Chir., 1880, 56, 529.
30	M.	1884	plomer	Sarcoma.	path. clav.	Recovery.	Berger, 51.
31	M.	1885	Other	Carcinoma of breast.	purb.	Recovery.	Berger, 21.
32	F.	1885	Monstani	Carcinoma of breast.	"	Died (shock).	Berger, 21.
33	M.	1887	Schmidt	Railroad injury.	part	Recovery.	Med. Press West. N. Y., 18-5, 86, 1, 101.
34	F.	1887	Jeannel	Arm bitten off by lion.	"	Died in 2 1/2 hours.	Bull. et Med. de la Soc. de Chir. Paris, 1888, 265, 14, 181.
35	F.	1887	B. May	Ossifying periosteal.	"	Recovery, died in year.	Ann. Surg., viii., No. 6, p. 434.
36	M.	1887	E. A. Lewis	1 sarcoma.	2 1/2	Recovery.	Ann. Surg., 1890, xi., 2.
37	M.	1888	B. May	Round-celled periosteal sarcoma.	part	Recovery.	Ann. Surg., viii., No. 6, 434.
38	M.	1888	Sondermayer	Sarcoma of humerus.	"	Recovery.	Wein Med. Woch., 1889, 39, 1121.
39	M.	1889	Parkers	Malignant tumor.	"	Recovery.	Jour. Am. Med. Assn. Chicago, 1889, 12, 215.
40	M.	1876	Wheelhouse	Injury.	"	Died in 51 hours.	Med. J. (Berger), 19.
41	F.	1889	Southam	Machine injury.	1 1/2	Recovery.	Allgem. Wein Med. Zig., 1878, 23, 116, Lon. Lan., 30.
42	F.	1890	Treves	Sclerthans (?)	1 1/2	Recovery, progress bad.	Brit. Med. Jour., 1880, 2, 1331, 2.
43	F.	1890	Wyeth	Sarcoma.	part removed.	Recovery.	N. Y. Med. Jour., 1891.
44	F.	1891	Ochsner	Osteo sarcoma.	"	Recovery.	Chicago Med. Recorder, 1891.
45	F.	1891	Ochsner	Sarcoma.	"	Recovery.	London Lancet, 1891.
46	M.	1891	Ochsner	Enchondro sarcoma.	"	Recovery.	Annals of Surg., Dec. 1895, Chic. Med. Rec., 1891.
47	M.	1894	Shepherd	Chondro sarcoma.	"	Recovery.	Marine Med. News, Halifax, 1891.
48	M.	1895	Chavasse	Injury.	"	Recovery.	Annals of Surg., Aug., 1895.
49	M.	1895	Kern	Sarcoma.	"	?	Annals of Surg., June, 1896.
50	M.	1895	MacKersie	Sarcoma.	"	?	Med. Sentinel, Portland, Ore.
51	M.	1896	Bishop	Necrosis.	"	Recovery.	

doses of sulph. strych., 1-60 grain. He was able to sit up in bed in five days, and now walks about the ward and is gaining daily. Extensive sloughing of the flaps occurred at the end of ten days, and now there is a large granulating surface which remains to be healed. During this sloughing stage chlorine and bromine dressing were used with remarkable results.

Dr. W. G. Crump has examined his sputa, the pus from the wound, and even tissue taken from the wound, but is unable to detect any sign of tuberculosis. The foregoing list is a correct record of the operation. It includes all the cases that have been reported from 1808 to 1896, and it has been made complete by adding to the report made by Dr. J. A. Wyth in 1891, all cases that have been recorded in the journals since that date. This list includes only those operations where the entire scapula, two-thirds of the clavicle, and the arm were removed together.

RENAL GLYCOSURIA.

BY CHARLES PLATT, PH.D., F.C.S.

Professor of Chemistry and Toxicology, Hahnemann Medical College, Philadelphia.

(Read at the November Meeting of the Pharmacological Society of Hahnemann College.)

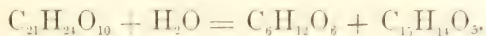
Is there a form of diabetes referable to kidney action alone? May sugar appear in the urine in absence of liver, pancreatic, or brain lesions, and independently of the nature of the diet? The term "physiological glycosuria" is an evasion, a weak acknowledgment of the existence of pathological conditions of unknown origin, but, aside from the so-called physiological appearance of sugar in the urine, do we always—do we *ever* understand diabetes mellitus itself? Why is it that some cases are benefited by a carefully restricted diet, while others date their final decline from the day upon which the diet was first put in operation? Diet is probably the only universally respected treatment for diabetic conditions; and yet, while the majority deny their patients starches or sugar, others are equally strenuous in their insistence that the carbohydrates should be freely included in every meal.

It is evident that the ætiology of diabetes is still an "un-

known quantity"—the "X" in the equation of which the one known factor is the appearance of sugar in the urine. Now in the light of this condition of things, the writer finds it strange that so little attention has been given to the researches of the past few years—on proteids, their constitution, or carbohydrates, their genesis within the body—or to the suggestive results of experimental glycosuria. To the homœopath, moreover, these results, suggestive of the ætiological conditions, have a further significance; they are as so many finger-posts pointing to rational, scientific modes of treatment.

We have in nature a class of compounds more or less resembling the alkaloids in their manner of action, but differing from these alkaloids in the products of decomposition. The *glucosides* have this particular property, that under certain well-understood conditions they may be resolved into simpler substances, one of which is always a sugar, and the other, a compound characteristic of the original. Thus, coniferin, a non-nitrogenous glucoside, $C_{16}H_{22}O_8$, yields, on decomposition, a glucose and coniferyl alcohol, the latter by oxidation being again transformed into vanillin. Salicin, $C_{13}H_{18}O_7$, yields a glucose and a substance known as saligenin. Amygdalin, a nitrogenous glucoside, $C_{20}H_{27}NO_{11}$, under the influence of a ferment, emulsin, splits up into glucose, hydrocyanic acid and benzaldehyde. Now certain of these compounds, notably, for instance, phlorizin, a glucoside derived from the root-bark of fruit trees, possess the power of producing a temporary glycosuria in animals. If phlorizin be administered in a single considerable dose, sugar appears in the urine a few hours later, increases rapidly to a maximum, and then slowly disappears. By continued, regulated doses, a glycosuric condition may be maintained almost indefinitely. As in the case of other glucosides, phlorizin gives rise to a glucose by decomposition, the reaction being expressed by the following:

Phlorizin, by hydrolysis, yields glucose (phlorose) and phloretin,



The first impulse would be, naturally, to attribute the urinary glucose to that produced in the above decomposition, but this would be an error. There is no quantitative relation between the two; the phlorizin is largely excreted unchanged, and,

moreover, phloretin,* one of its decomposition products, will itself produce a pronounced glycosuria in animals. The true origin of the sugar will be referred to later.

There is nothing novel, however, in the above-mentioned production of glycosuria by phlorizin, the fact has been generally recognized for a number of years; the particular object of this paper is to call attention to certain peculiarities of this phlorizin diabetes in which it differs materially from other more ordinary forms. These peculiarities, as developed by von Mering, Minkowski, Zuntz, Klemperer, and others, may be summed up as follows: In phlorizin diabetes the sugar of the blood is not increased as it is in regular diabetes; the elimination of the sugar is not checked by destruction of the liver substance; the extirpation of the kidneys is not followed by augmentation of sugar within the body; phlorizin injected into a renal artery produces the elimination of sugar from the one kidney alone, the urine from the other kidney remaining sugar-free for about one-half hour after the injection; the amount of sugar passed is not proportional to the dose of phlorizin, except within narrow limits; and, finally, the amount of sugar eliminated is practically independent of the diet.

The inference certainly is that the kidneys here play a most important and almost exclusive rôle in the sugar elimination. Now, granting this, it seems evident that the integrity of the kidney is necessary to the elimination, and upon the development of an atrophic condition we would expect a decrease in the amount of sugar passed. Such is actually the case. When albumin appears in the urine of a diabetic, the sugar certainly does diminish, and when the renal atrophy has become complete, the sugar entirely disappears. The patient dies from uræmic poisoning, not from diabetes.† It is true that in the polyuria of renal atrophy, the urine will contain sugar if the patient be given an abundant carbohydrate diet, but this fact assists the renal theory, and is not to be considered as an objection to it.

The most interesting of the peculiarities of phlorizin diabetes is that of the relation of the sugar elimination to the diet. In experimental glycosuria developed in a normal individual the

* Phloretin, a "phloroglucide," yields phloroglucin, but no glucose.

† *La Médecine Moderne*, Paris, May 30, 1896.

sugar is not increased by a carbohydrate meal. In the more heroic experiments possible with animals, there is discovered a dietetic influence of gravest significance in the treatment of diabetes. With a normal mixed diet the animal suffers no inconvenience, the sugar in the urine is the one evidence of an unusual condition, but when the carbohydrates are insufficient in amount, then grave phenomena are produced. The animal becomes feeble, loses flesh and appetite, large quantities of acetone and oxybutyric acid appear in the urine, and, finally, a condition analogous to that of diabetic coma results.* Note that the absence of carbohydrates does not inhibit the production of sugar, nor does this disappear even during starvation; but note, also, that the decline and coma itself are results of this carbohydrate deficiency.

It is evident, from what has already been said, that the sugar of phlorizin diabetes is derived neither from the phlorizin itself nor from the carbohydrates of the food. Further, by experiments of Prausnitz, Cremer, Ritter, and others,† the sugar cannot be derived from the glycogen of the body. Von Mering has already called attention to the production of sugar in the urine of starving animals by administration of phlorizin (for instance, to a dog after eighteen days without food, a period quite sufficient to have removed all liver and muscle glycogen), and his results have been confirmed by others. In the absence of carbohydrate food the sugar is formed from the proteid of the tissue, nitrogenous metabolism running parallel with the amount of sugar excreted. That this is not a fanciful origin to ascribe to sugar is demonstrated by the recent investigations of proteid constitution. Von Mering classes albumin as a glucoside, and Pavy arrives experimentally at the same result, as did, also, the eminent French chemist Schützenberger over twenty years ago. The glucosidal nature of proteid matter explains certain anomalies of fermentation observed by Pasteur, and it offers the most rational solution of proteid and glycogen formation within the body.

Phlorizin, then, by virtue of its inherent properties, possesses the power of producing glycosuria without glycæmia, and this fact alone, or considered with the non-augmentation of sugar

* Cartier, *Glycosuries Toxiques*, Paris, 1891.

† See *Zeit. Biol.*, 29.

in the blood after extirpation of the kidneys, would seem to locate the principal seat of action in the kidney itself. The increase of carbohydrates in the food is not followed by a corresponding increase of sugar in the urine, though a deficiency of carbohydrates gives rise to serious disturbances which finally result in a diabetic coma. The source of the sugar in the latter case, after exhaustion of the glycogen reserve, being the proteid matter of the tissue.

It is not to be maintained that all diabetes is of this character, that would be far from the truth; it is suggested, however, that a renal diabetes may exist, and, if so, that it is of greatest importance to detect it at once. Blood tests, or, more easily, dietary tests, will afford a convenient means of identification. The treatment would then suggest itself, and certainly would not begin with a cancellation of carbohydrates from the patient's dietary.

PELVIC NEURITIS AS IT APPEARS IN WOMEN, WITH SPECIAL REFERENCE TO ITS ÆTIOLOGY.

BY W. O. McDONALD, M.D., NEW YORK.

(Read before the New York State Homœopathic Medical Society, Rochester, Sept. 22, 1896.)

INASMUCH as this affection is without a history (being, as far as I know, an undescribed disease), I will, I trust, be excused if I go somewhat into elementary matters in the beginning. As I am not addressing those who have made a special study of the nervous system, I will take the liberty of going over the anatomy of the structures implicated, by way of a preliminary to what I have to advance later.

Concerning the nerves of the pelvis, Harrison Allen says that the sacral plexus is derived from the anterior branches of the last lumbar and the four upper sacral nerves; and from this plexus are given off the two gluteal, the muscular, the cutaneous, the small sciatic, the great sciatic, and the pudic. Of these, the small sciatic sends a branch, called the pudendal, to the external genital organs; while the pudic, which is distributed to the more accessible parts of the genital canal and pelvis, is the trunk in which we are particularly interested. It

is true that the balance of the sacral plexus can correctly be called pelvic, yet so much of it is extra pelvic in its area of distribution, that I do not feel called upon to consider it.

Allen goes on to say that the pudic nerve arises from the second, third, fourth and, at times, from the fifth sacral, forming a plexiform arrangement, with twigs from the sympathetic; thence passing along the outer wall of the ischio-rectal fossa, to leave the pelvis by the great sciatic notch, re-entering through the lesser notch—Savage states—into the posterior perineal space, and giving off branches as follows:

The inferior hemorrhoidal to the sphincter and rectum—the anterior and posterior superficial branches; the anastomotic branch to the lesser sciatic: the nerve thence running along the inner side of the tuber and ramus of the ischium, to be lost in forming a nervous sheath for the clitoris.

The area of the pudic nerve may be thus defined—as extending from the vicinity of the second, third, and fourth anterior sacral foramina, along the pelvic wall to the great sciatic notch, over the external surface of the ischiatic spine, from the lesser sciatic notch inside the pelvis, on the inner surface of the tuber and ramus of the ischium to the clitoris.

The text-books unite in saying that the vagina, uterus, tubes, ovaries, and adjacent tissues, which enter into the formation of the roof of the pelvis, are supplied by the sympathetic system of nerves through the medium of the hypogastric plexuses, to which (according to Gower) twigs are sent by all the lumbar nerves, and by the four upper sacral, also.

There are some other nerves which deserve mention, derived from the lumbar; as, the ilio-hypogastric, the internal branch of which goes to the hypogastric region; the ilio-inguinal, a branch of which goes to the groin and greater labium, and the genito-crural, which sends a branch to almost the same area. The other branches of the lumbar plexus, which go to the inferior extremity, are in the false pelvis and only in passage.

Neuritis, in general (quoting Sinkler), results from injuries; as, wounds and contusions; from compression of trunks from external sources; as, from tumors, growths and cicatrices. At times inflammation will extend from neighboring tissues, as in arthritic. Cold causes many cases; also the gouty and rheumatic poisons. It is, at times, due to the cachexias, as

syphilis, cancer, etc. Alcohol is a common cause of the disease. An injury or inflammation of a peripheral nerve may give rise to an ascending or migratory form, which will extend high in the plexus to the roots, involving finally, in this way, other nerves.

Neuritis is, like peritonitis, a secondary or associated disease. In support of this Sinkler specifies the following varieties: the alcoholic; those due to carbonic oxide, to lead, to arsenic; that of atheroma; to intestinal parasites; the endemic forms, as the beri-beri (said by one author to be owing to carbonic acid intoxication); the peripheral form of old age; the malarial; the diphtheritic; the typhoid; the syphilitic; the tubercular; the rheumatic; the gouty; the septicæmic; the diabetic; the leprosy; and even this does not exhaust the list, as it does not include the cancerous or the leucocythæmic.

Just to what extent these facts in regard to neuritis in general apply to the pelvic form, I am not able to indicate, but I propose to submit an analysis of several cases which have recently come to my notice, as a contribution to the study of the ætiology of the disease as it affects the nerves of the pelvis.

My attention was first called to the malady by Prof. J. T. O'Connor, as explaining certain symptoms which I had met with rather frequently in making examinations of women. I have said that the disease is, as far as I can find, without literature. I find no mention made of it in the *Index Medicus* from 1890 to 1895, inclusive. It did not appear in the indices of some twenty-eight special treatises upon gynæcology and upon diseases of the nervous system, which I examined. I am not aware that it has been the subject-matter of any book, pamphlet or journal article, consequently I would appear to have a virgin field in thus presenting it.

But if pelvic neuritis, as it appears to the gynæcologist, has been ignored, what is styled puerperal neuritis has been recognized and dwelt upon by quite a number of writers. Audrè Tuilant published a monograph in 1891, of some sixty-seven pages upon "Névrite Puerperale," and his biographical index furnishes thirty-seven references to writers upon the subject during the period extending from 1881 to 1890.

Tuilant, to whose work I shall have occasion again to refer, separates the neuritis of pregnancy, due, in his opinion, to the

same form of infection which causes the uncontrollable vomiting from the neuritis of parturition, which he attributes to the febrile complications of labor.

As the disease has not, therefore, been the subject of description, it will, perhaps, be appropriate for me to specify the symptoms which, in my opinion, indicate its existence. In the first place, inflammation, as it affects the ilio-hypogastric, ilio-inguinal and the genito-crural nerves, must be recognized by sharp study of the location and limitation of pain and tenderness in the tissues to which they are distributed. I do not propose to go into the consideration of them. Again, while the sacral plexus is pelvic, its trunks are so largely extra pelvic, and have been so thoroughly studied in their diseased manifestations under the caption of sciatica, that I will ignore the plexus, with the exception of the pudic. Following Prof. O'Connor's lead in this, I take the characteristic of pelvic neuritis to be tenderness located in the trunk and in the area of distribution. In a pronounced case, the nerves of the vagina, uterus and roof of the pelvis will be implicated, and can be, I think, included under the same caption.

The anatomical extent of the nerve has already been indicated. In making a digital pelvic examination, having ascertained that the inner side of the pelvic walls are tender, the landmark to be sought is the tuberosity of the ischium, locating this with the thumb; then sweep the finger backwards, making pressure over the sciatic notches, and thence up on the sides of the anterior surface of the sacrum; again seeking the tuber, bring the finger forwards upon its inner side over the surface of the ramus to the vicinity of the clitoris. This sweep of the examining finger will comprise the extent of the nerve trunks as such; the area of distribution is wider to the tissues and soft parts in the vicinity.

Whether the spontaneous pains of the pelvic neuritis are sufficiently characteristic to permit of a diagnosis, I do not know. I am inclined to think that there is food for study in this direction.

I am aware that the recital of cases is, in general, out of place in an article to be presented to the Society; but inasmuch as the entire value of my presentation is contained in these cases, I am compelled to inflict them. Four of my

cases are childless women; the other four have had from one to three children each. I will present the barren class first:

CASE I.—N. C.; 20 years old; unmarried. Her menstruation is normal, excepting that for the past two or three years she has had pain during the first and last days of the flow. She has antelexion of the body and cervix, with some retroversion, and with undue mobility of the uterus. She has tenderness in the area of both pelvic nerves, extending from the sacrum forwards to the sides of the ischiatic bones; more pronounced upon the left side, but there is no sciatica. The vaginal aperture is rather small; she probably has never copulated; certainly has never been pregnant. Presents no history of accident, but states that she has been examined repeatedly; that the uterus has been lifted and treated by means of tampons.

I take it that the retroversion, the undue mobility of the uterus, together with the lifting of the organ and the use of tampons after a rough, rude fashion, perhaps, can be held to be responsible directly for the sharply circumscribed neuritis. This is my only case of an unmarried woman with pelvic neuritis.

CASE II.—S.; 34 years old; married; never pregnant; had sciatica ten years ago, and still feels it, at times, somewhat. She has descent of the uterus in the second stage; that is, with the uterus low and in the axis of the vagina. There is moderate tenderness in the course of the trunks of both pudic nerves. She presents many symptoms in the way of pain, some of which are due to the displacement, and some, in my opinion, are neuritic. I would only present the association of neuritis with uterine displacement in this case, as the date of the sciatica is too remote for me to make any attempt at determining which was primary in the order of time.

CASE III.—E. N. S.; 37 years old; married; never pregnant; menstruation normal, excepting some dysmenorrhœa during the past three months. After a rather harsh course of treatment by tampons, she was seized with a right pelvic peritonitis, which confined her to the bed for seven weeks. She has the uterus fixed in the right side of the pelvis in right latero-version. She presents pronounced tenderness in the right pudic nerve, and in the right sciatic as well. She has spontaneous pain in the area belonging to both nerves.

Re-examination, one year later, verified the continued existence of the conditions as given above. Apparently harsh mechanical treatment, with tampons and the like, excited a pelvic peritoneal inflammation, which extended to the right sacral plexus.

CASE IV.—II. J. P.; twenty-seven years old; married six years; one miscarriage at six weeks during the first year. Recovered perfect health. Being sterile, she was subjected to dilatation and curetting. She was evidently infected, as she had fever for six months, an attack of "pelvic cellulitis," so-called, confining her to her bed for eight weeks. She has salpingitis and peritonitis left side, with marked tenderness in the areas of the pelvic nerves, more pronounced upon the left side. The symptoms of peritonitis are getting better, the pains of the neuritis are getting worse. Salpingitis and peritonitis from operative infection, and the extension of the inflammation to the sacral plexuses, and probably to the pudic nerves, is my reading of this case.

Now it is to be noted that this class all present histories indicating that the internal genital organs have been abused.

CASE I.—Uterine displacement and undue mobility entail a certain amount of injury through strain, and the treatment—lifting and tamponing—is such as is liable to do mechanical harm to the tissues by both stretching and pressure.

CASE II.—Presented to the association, of uterine displacement with neuritis of the pelvic nerves.

CASE III.—The relation between pelvic injury and pelvic inflammatory reaction is more definite. Tamponing carried out after such fashion as to inflict severe pain, is followed by pelvic peritonitis. As sequences we have the uterus finally fixed to the right pelvic wall, and pronounced inflammation of the right sacral plexus affecting particularly the great sciatic and the pudic.

CASE IV.—A woman in perfect health is infected during a certain surgical procedure, recovering after an illness lasting eight months. She presented a slowly vanishing salpingitis and peritonitis of the left side, and a constantly increasing neuritis affecting both sides.

CASE V.—C. D.; married; thirty years old; one child six years old, and miscarriage three months ago. Dysmenorrhœa

severe before childbirth. She suffers from pelvic examinations for twenty-four to forty-eight hours. Leucorrhœa constant. Many pains aggravated by menstruation. Had bilateral laceration of the cervix, which joins the body at a sharp angle. Tenderness in the areas of both pudic nerves, more pronounced on the left side. Walls of vagina, cervix, and body of the uterus tender also. Her symptoms, pain, etc., date from the birth of her child: the labor was long—thirty hours—and she was sick for three weeks after it.

While I believe that pelvic neuritis may originate directly from the damage caused during labor, yet I am inclined to think that in many cases it is an indirect sequence, being excited and maintained rather by the lacerations of the cervix, etc., than by the traumatisms themselves.

CASE VI.—B.; thirty-eight years of age; had two children, aged now eight years and two years. Menstruation normal. Some leucorrhœa. Pain not affected by menstruation. In the right flank, deep, and inside the wing of ilium the pain is burning, comes and goes, aggravated by bending body to the right. No physical signs of renal, appendicular, Fallopian or ovarian disease. Cervix split bilaterally; body upright; pronounced tenderness inside pelvis in the area of the right pudic nerve.

Here we have the association of right pelvic neuritis, with laceration of the cervix, and both dating from childbirth, though just why the right pudic nerve only is affected, I am unable to conjecture. Pain deep in right flank and inside wing of the ilium is suggestive of implication of the branches of the first and second lumbar nerves, the ilio-inguinal, ilio-hypogastric, and the external cutaneous nerves.

CASE VII.—J. J. J.; married; forty-four years old; had three children and one still-birth in the course of four years; the last birth fourteen years ago. Menstruation normal in time and duration, pain before, with, and after flow takes half of her time. Whites scanty and irritating. For past fifteen years, burning pains in lower end of the abdomen, groins, and inguinal region, also in hips and anterior surface of thighs. Tenderness all over the anterior parts of pelvic end of the body, inside and out, vulva, vagina, cervix, uterus, and in the area of pudic nerves, but not in the sciatics.

This anterior pelvic neuritis dates from the four years during

which she bore four children, and is due, in my opinion, to damage done in child-birth. This woman for years past has been made sick from three to four days by pelvic examinations, and for almost as long by copulation.

CASE VIII.—F. F. B., married woman, 45 years old, who has had three children, the last labor, instrumental, followed by puerperal fever, took place eight years ago. Menstruation too frequent—twenty-one days—too profuse and too long—fourteen days. Some pain. Constant whites. She presented slight descent of the uterus. She has general peripheral sensory neuritis, afflicting particularly the shoulders, chest, pelvis and lower extremities, both sciatics. There is pronounced tenderness all over the areas of the pudic nerves. Suffers for twenty-four hours from pelvic digital and instrumental examinations.

This woman has general peripheral neuritis, pelvic neuritis with the rest. She refers it to her child-bearing time. It is to be noted that her pelvic organs were abused by the instrumental labor, which was followed by puerperal fever, and that she had slight descent of the uterus. This patient was operated upon for the repair of cervical laceration since the last child-birth. This may account for the fact that the pelvic neuritis is not any more severe than that of other locations.

There is but little comment called for upon this child-bearing class of cases. All present the evidence of being injured during labor, in the shape of pronounced laceration of the cervix. It is true that in Case VIII. this damage has been repaired by operation. This fact may be taken as proof that the harm had been inflicted. She had the association of pelvic neuritis with undeniable puerperal damage, and I think there is little reason to question the relation of cause and effect between the two.

Tuillant, in his monograph, divides the cases of polyneuritis which he presents into two classes: the generalized form and the localized form; and this last into the superior type, those affecting the upper extremities, and the inferior type, those located in the lower extremities.

In the matter of causes he accepts two only as being beyond dispute, holding that the polyneuritis of pregnancy is due to the same kind of infection which produces the uncontrollable vomiting, while that of parturition he attributes to the febrile

infections—sequences of labor. He is inclined to reject entirely the theory that pressure or mechanical causes can be held responsible for any case of neuritis.

Cases IV., V., VI., VII. and VIII. presented by me can be fairly enough held, I fancy, to have been caused in accordance with Tuilant's theory, infection taking place after a surgical procedure in Case IV., after cervical laceration of labor in the other four cases.

But what are we to do with Cases I., II. and III? In these the neuritis appeared apparently as a sequence of the application of mechanical means, but in such times and fashion as would justify the view, I think, that the pelvic neuritis was the result of physical violence. Certainly there was no wound infection in these cases. There was nothing in the histories to suggest that any kind of infection had taken place. In two cases descent of the uterus existed when I examined them. What called for the treatment in their cases I do not know, but all three had been subjected to mechanical treatment—lifting the uterus, packing and tamponing, and the inference is at least respectable, in my view, that the neuritis was the direct result of violence applied in this way.

In Cases I., II. and III., there was no apparent source of infection, and judging from the association found it seemed to me warrantable to assume that descent of the uterus and mechanical treatment applied can be held responsible for the production of the inflammation found by me to exist in the pelvic nerve-trunks and areas of distribution.

NIGHT SWEATS.

BY E. M. HALE, M.D., CHICAGO, ILL.

I HAVE read with great interest the article by Dr. Snader on the remedies for night sweats, and his high estimate of silica for that symptom.

While I have found silica very useful in cases where breaking down of lung tissue, and extensive suppuration elsewhere, I have not found it useful in cases due to malaria, exhaustion, la grippe, or loss of blood.

Dr. Snader does not mention several drugs which I have found often specific.

Camphoric acid, in doses of 5 to 10 grains, is the most generally useful remedy I have ever used. I only give one dose in the evening, rarely two. The sweats often cease at once under its use.

Hydrastis in doses of 5 to 20 drops of the tincture always succeeds when the sweats are the result of debility from exhausting diseases, as typhoid fever, la grippe, or extreme exhaustion from over-work. The dose is given several times during the day.

In some chronic cardiac diseases with very low arterial tension, no drug gives better results than digitalis in doses of 5 drops four times a day.

Cimicifuga in small doses often arrests the sweats of rheumatism, while our old drug china is almost specific when profuse sweats occur on going to sleep.

I cured one obstinate case of night sweats after influenza with pyrotoxin, $\frac{1}{100}$ grain three times a day.

HEAT PROSTRATIONS TREATED AT FLOWER HOSPITAL, NEW YORK CITY.

BY EDWARD D. RUDDEROW M.D., NEW YORK.

(Read at the Rochester Meeting of the New York State Homœopathic Medical Society, September 22, 1896.)

THE hot wave which swept over New York City during the summer of 1896, carrying death to hundreds of victims, afforded to those in charge of the hospitals an opportunity for the study of insolation which has rarely been seen before.

Every hospital maintaining an ambulance service was taxed to its utmost, the calls being so frequent that the police patrol wagons were also utilized and lent their aid in bringing in the victims of the sun's awful work.

As the treatment of these cases at the Flower Hospital was unlike that which was given in most of the other institutions, I will endeavor to set it forth as accurately as possible. Complete precision, however, can not be expected, as the rush of

cases was such that only crude records could be taken at the time. The total number of heat cases treated in the five memorable days from August 9th to the 13th (both inclusive) was seventy-six. Of these, about 33 per cent. averaged over 108° temperature, many causing the mercury to reach the top of the thermometer, at least 110° . Later, a thermometer registering to 120° was obtained, and the highest degree then recorded was 112° . As the cases were brought in they were taken immediately to the cellar of the medical department, where a spring cot, covered by a rubber sheet, was placed. The patient was rapidly undressed and laid on the back and an ice cap applied to the head; the rectal temperature was then taken, after which the whole body was vigorously sprayed with water from the hydrant. The spraying apparatus consisted of three lines of garden hose attached to the ordinary water faucets, each line of hose being provided with a nozzle, which broke the stream into numerous fine needles. The temperature of the water was about 75° , and the force with which it issued from the pipe considerable.

The spray was directed all over the surface of the body, care being taken to avoid the nose, mouth and ears of unconscious patients. The stream was directed along the course of the larger vessels, the carotids, femorals and in the axilla.

No massage or friction of any kind was used other than that caused by the force with which the spray impinged upon the skin, and no ice was applied except to the head.

While under the spray, the rectal temperature was taken from time to time and the pulse carefully watched. In those cases where the temperature ran very high (108° or over) the spray was continued until the thermometer showed 103° , then the patient was wrapped in two blankets and laid on a cot in the laundry department [where a sunstroke ward had been improvised]. This being the coolest place to be found, about 10° – 15° less than that of the outer air.

It was noticed after one or two trials that when high temperatures were reduced below 103° , they subsequently sank to subnormal, while those which were sprayed until 103° was reached, afterward gradually went to normal. There would frequently be a secondary rise of the curve to about 104° – 105° in the extreme cases; the spray would then be again resorted

to until the mercury went to 101° , when the patients were again put to bed.

In the milder cases, where the initial temperature did not exceed 104° , the spray was used until the mercury went to 100° . Any slight secondary rise was disregarded.

Throughout the entire treatment the pulse was carefully watched, and the sulphate of strychnine in $\frac{1}{30}$ -grain doses administered at half-hour intervals until two doses had been given.

Where a marked tendency to convulsions occurred, sometimes amounting to opisthotonos, morphine sulphate in $\frac{1}{4}$ -grain doses was used, belladonna being also given in water as indicated homœopathically.

The condition of the cases upon admission varied greatly. All had the hot, dry and generally pale skin. In the worst cases, however, a blue or black color of the face simulating asphyxia was very perceptible and alarming. Some were conscious, but the extreme cases were generally comatose and exhibited either mild or raving delirium, which was generally accompanied by involuntary emissions of urine and feces. Vomiting was not common, but many cases presented severe clonic spasm resembling the convulsions of epilepsy.

Of the seventy-six cases treated, three died; one of these, a man of about 40 years, was extremely obese, naturally inclining one to think of a fatty heart; another whose temperature ran very high recovered consciousness and appeared to be doing well, but expired suddenly about one hour later. It was afterward learned that he had been addicted to the excessive use of alcohol. The third case had been treated at home for about twelve hours, and her temperature had averaged 105° . She lived for three days, developing pneumonia, from which she died. In conclusion, I would say that the success of this treatment seemed to lie, first, in the prevention of all shock (the water used being of a temperature of about 75°); second, the absence of all violent or extreme measures, such as massage, flagellation, etc., which are commonly associated with ice treatment, and third, the ease with which cases are manipulated, no masseurs being required, the force of water furnishing all the friction necessary.

EDITORIAL.

WM. H. BIGLER, A.M., M.D.

WM. W. VAN BAUN, M.D.

A HAPPY NEW YEAR.

It is a delicate task, in addressing a physician, to formulate wishes for a happy New Year so as not to offend "persons of sensibility," as the French would say, by an appearance of calculating selfishness. In wishing "health and prosperity," terms surely general enough under ordinary circumstances, care must be taken to limit the application of the wish to his own particular surroundings, himself and immediate family, and to those only of "his sisters, his cousins and his aunts" who are on the free list, else is there little chance for the realization of the second part of the wish. Among the thorns which line the path of the physician, and they are many, this one is the sharpest, that his prosperity is founded upon the misfortune of others, and that no matter how welcome his coming may be, his departure is still more so.

With this excuse for not specifying more particularly the content of the New Year's greeting addressed to our subscribers as personal friends, we turn to them as subscribers merely, and wish them in the new year brains to appreciate the great merits of the journal, plenty of money to pay for it promptly and—no time to read it.

Knowing what attractions the journal has had and will have, the great value of the papers appearing and to appear, we feel that if they do not read it, it will be only in consequence of a rush of business such as has not for a long time rejoiced the hearts of the general profession.

SOLITARY CONFINEMENT AND STATE HOSPITALS FOR THE CRIMINAL INSANE.

THE necessity for the establishment of such institutions, either under independent control or as annexes to already existing hospitals for the insane, was never brought more strikingly before the public conscience than by the recent inquiry into

the administration of the affairs of the Eastern Penitentiary of Pennsylvania.

It appeared from uncontradicted evidence that there are a large number of insane prisoners in the institution; the physician of the penitentiary acknowledges the presence of "ten or twelve persons whose insanity cannot be doubted," but one of the commission testified to having found on personal examination "between ninety and one hundred insane people in the institution."

The learned judge, with that supreme belief in the infallibility of judges and courts which he shares in so large a degree with other members of his profession, said: "All these people are in there under an order of court, which implies their sanity. They had all been convicted of crime, and if they were not sane would not have been convicted." While we share the belief of many outside the legal profession that in some cases conviction has been a proof rather of insanity than of its opposite (and that not of the convict), we most heartily approve of the deduction drawn that the method of penal administration which would result in rendering insane even a small number of presumably sane criminals was "not a proper method." We think that we would venture to go a little further and say that besides not being "proper," it was pre-eminently a cruel, barbarous and criminal method, whether sanctioned by law or not.

It seems, however, that by several acts passed by the Pennsylvania Legislature in 1883 power was given to the warden or overseer, or to any person outside of the prison, to apply to the judge of the court committing the prisoner, for an investigation touching his sanity, and even when the prisoner seemed merely to be in danger of becoming insane.

It was testified, too, that a large number of persons, on the expiration of their terms, have been committed to insane hospitals, or places for the treatment of the insane, but that no instances were known of such transfers having been made before their terms had expired.

Can any more heinous crime against the liberty of the individual and the welfare of the community be imagined than to inflict upon a criminal a punishment which, according to the testimony of one of the experts examined, "tends to aggravate

any tendency to insanity which may exist," and which "does much to produce delusional insanity?"

The reluctance and, indeed, refusal of the authorities of the institution to part with any of the insane inmates could not proceed merely from an unwillingness to deplete their "wash-house gang," composed chiefly of these unfortunates, nor could it be satisfactorily explained by their asserted belief that they could be as well cared for in the penitentiary as in an institution devoted to the special treatment of the insane; the cause must lie deeper. It is probably to be found in some of the State fictions of finance, by which Peter is borrowed from in order that Paul may be paid. Whatever the cause, it must be a powerful one, and we trust it may be discovered in subsequent investigations and removed, since it has evidently been sufficient to nullify the plain provisions of the beneficent acts above referred to.

We hope that the outcome of this investigation may be the abolishment of solitary confinement as a mode of punishment, wrong in principle and cruel and disastrous in consequences.

We also look forward with hope—we do not venture to say with expectation—to the time when, through a development of social science, the idea of punishment will be banished to that limbo which is now considered as the Ultima Thule of all convicts; and when the recognition of the relativity of crime and of the extent of the delegated authority of society will lead to consistent methods of reconciling individual liberty with social security.

KEEP TO YOUR TEXT.

THE Rush Monument project of "the regular medical profession" seems to resemble the immovable motor of the famous Keely, in that it will not rush nor be rushed.

The chairmen of various committees appointed to push the project have sent out a touching appeal to their professional brethren to subscribe more generally and more generously to the cause they represent.

They pay a deserved and gracious compliment to the "remarkable success of the relatively small body of homœopaths in collecting \$75,000 for the erection of a monument to Hah-

nemann," "the model of which, when on exhibition, excited general admiration." In gloomy contrast with this, "the regular medical profession, numbering 100,000 more than the entire body of homœopaths, has thus far collected less than \$4000 towards the proposed monument to Dr. Rush." In despair they ask, "Are the regular physicians willing to allow an insignificant bust or mediocre statue to be erected, in pitiable contrast with the splendid testimonial in their Capitol City to a foreign theorist by a comparatively small body of his misguided followers?" Like the scorpion, their intended sting is in their tail. Why should they depart from their text in order to try a fling at those whom they have just proved to possess superior ability, both mental and pecuniary, to appreciate and honor merit? We recognize the difficulty with which these gentlemen have to contend. In that conglomerate of exploded, exploding and explosive practices which is called "regular practice," there is an absence of that element of "unity of design" which alone could unite its adherents to concerted action in honoring any one individual. We know what Hahnemann has done for us and for medicine, but what has Dr. Rush done for them any more than a number of others whom they might "delight to honor?"

If the design for the proposed memorial has not yet been decided upon, and, from the circular referred to, we presume it has not, we would suggest that it take the form of a Walhalla, which might be constructed both extensively and inexpensively of "staff," such as was used in the exhibition buildings in the Windy City at the late Exposition. In this could be placed the statue of Hippocrates, made of the same material, surrounded on all sides, in front and behind, by the busts of those who have contributed to the practice of "regular medicine." We would suggest that these latter might well be made of ordinary plaster, since they would have to be destroyed every three or six months, and their places taken by the busts of those who had proved their theories to be erroneous and their practices useless, if not harmful, or who had successfully run down a new bacillus or discovered a sure cure for tuberculosis. We submit that the effect would be imposing, and would afford an opportunity for a certain "rotation in office," and its accompanying notoriety, out of reach of the hampering restrictions of

the Code. The array of ephemeral gods would be quite formidable, and would present an instructive contrast to the brazen solitude of the "foreign theorist."

We are afraid that we, too, have wandered somewhat from our text, but the temptation to do a kindness by our suggestion was too great to be resisted.

We are never angered by such flings at homœopathy. Whatever unsanctified feelings of wrath attempt to rise in our hearts at such "regular treatment" are at once quelled by the sweet thought, so simply expressed in Watt's beautiful poem, "God hath made them so," for some inscrutable purpose, the wisdom of which we do not venture to impugn.

THOSE PRINTERS!

WE read lately, in one of our exchanges, a paper on the treatment of "Summer Complaint." It recommended washing out of the stomach and irrigation of the colon two or three times a day; calomel and bismuth; mild black tea and veal broth instead of milk.

All very well—*perhaps*—but what must have been the feelings of the author to find that the printer had made him say, with unexpected and unusual candor, "the above requiem may be observed," etc.

From similar personal experiences we know that the writer would gladly have listened to the "requiem" of that prescient printer could everything pointing to "rest for his soul" have been rigorously excluded therefrom.

EARLY DIAGNOSIS OF ASCITES.—Dr. Luigi Alpaio Novello (Turin), after calling attention to the ordinary method of detecting fluctuation by placing the hands upon each side of the abdomen and tapping with the one, as well as with Bard's method, the lumbo-abdominal method, states that ascites can only thus be discovered where the quantity of effused fluid is *great*. He proposes another means by which one may make out an early diagnosis. The patient is placed in the genu-pectoral position; the examiner places one hand under on the abdomen, while with the other he makes slight percussion upon the lumbar side of the flank to detect fluctuation. Slight percussion is necessary or one will displace the fluid into the periumbilical region.—*La Settimana Medica*, No. 23, 1896.

GLEANINGS.

THE QUALITY OF SAFETY IN A HYPNOTIC.—That the quality of safety is esteemed one of the most important in a hypnotic is well illustrated by the gradual, but unmistakable wane in the popularity of chloral, which was once considered the ideal sleep producer. Pharmaceutical chemistry has now placed in the hands of the medical profession a drug which not only produces normal physiological sleep with great celerity, but is practically safe. Trional, to which this statement refers, has been recently submitted by Dr. H. Gieseler (Inaugural Dissertation, University of Halle, 1896) to a thorough investigation of its action upon the general nutrition. In an experiment undertaken on himself, the author took four large doses of the drug in fractional dose, namely, 3.0 gm. the first, and then after an interval of three days, 3.0 gm. and 2.0 gm. respectively. To determine accurately the nitrogenous equilibrium the diet was regulated for several days before the period of experiment, which lasted thirteen days. The urine was examined daily for ammonia. This was done for the following reason: It has been assumed that the disulfones (sulfonal and trional) give rise to the formation of acids in the system to which their effect is partially due. Gaethgens, however, has shown that a dog may be given more sulphuric acid than the amount of acids produced by sulfonal or trional in large doses, without deleterious effects. Kast has also administered ethylsulfonic acid for a long time to a dog without producing effects similar to those of trional. Mayser, further, was unable to detect any diminution in the alkalinity of the blood after the administration of hypnotic doses of trional. In order to definitely decide this question, the author proceeded according to a method suggested by Prof. von Mering. It has been shown by Walter as the result of experiments on carnivora that these animals possess peculiar regulation mechanism, by which any acids formed are rendered innocuous by ammonia. Walter and Coranda have demonstrated on dogs and men, that after introduction of hydrochloric acid into the system there is an increased excretion of ammonia at the expense of the uric acid formation. After taking the trional in the manner already explained, Gieseler found that the excretion of ammonia was not in the least influenced by the drug, and this was confirmed by an experiment made on a dog. It can, therefore, be positively stated that the formation of acids takes no part in the hypnotic action of trional. The author also investigated the excretion of nitrogen in the urine during the administration of trional, and found it practically normal, so that, conformably to the experiments of Schaumann, this drug can be said to exert no influence upon the metabolism, the bodily weight remaining unchanged. Hence, the conclusion seems entirely justified that in the very rare instances where toxic effects follow the use of trional, these are not attributable to disturbances of nutrition, but simply dependent upon accidental predisposing factors. As Gieseler justly states, it is not possible to administer

uninterruptedly in large doses and for a long period, any drug without risk, especially in persons weakened by disease, and whose organs, especially the nervous system, are impaired in their function. That under these unfavorable circumstances trional may act injuriously can be easily understood, and it is, therefore, advisable to give the drug in the proper manner, in an abundance of hot fluid, in the smallest effective dose (1.0 gm pro die), and with interruptions. On the ground of his studies of the action of this disulfone on the nutrition of the body, the author, however, has no hesitation in awarding trional the first place among hypnotics.

ON THE ÆTIOLOGY OF SEROUS PLEURISY.—Dr. Aschoff has examined the exudates from fifty-seven cases of serous pleurisy which either developed from acute or chronic affections, as cancer of the lung or stomach, or influenza, etc., rheumatic pleurisy, pleurisy in tuberculous subjects, pleurisy in subjects known to be tuberculous, as well as in those where no apparent cause could be discovered—idiopathic pleurisy. Now, while intra-peritoneal inoculations on guinea pigs of the exudates from secondary pleurisy after acute or chronic affections were absolutely negative, yet in 75 per cent. of the *idiopathic ones* intra-peritoneal tuberculosis supervened in the animals. In comparing these results with those from exudates from pronounced phthisies (59 per cent.), and with those from suspected subjects (75 per cent.), one is justified in concluding that the immense majority of those cases of pleurisy developing without apparent cause under the clinical picture of *simple pleurisy are tuberculous*. It is not, therefore, to be assumed that this gives an unfavorable prognosis, for frequently the greater number of these cases recover, and that definitively (which is in accordance with our present views of local tuberculosis).—*La Semaine Medicale*, No. 27, 1896. [Dr. Kr. Thue (*Bidrag til Pleuritens Aetiologi*, Christiania, 1895), from examination, bacteriologically and clinically, of thirty-five cases of serous pleurisy which were observed at the Rigs Hospital of that city, concludes that the greater number of those cases of pleurisy which we regard as of simple serous form are of *tuberculous origin*, though he is inclined to believe that there is a certain number which are due simply to "catching" cold. In four cases where cold was set forth as the cause, tuberculosis was found in one and suspected in the others. In the great majority of cases cold was not looked upon as the efficient cause. Prof. Goodno (*Practice of Medicine*, vol. ii., p. 308) quite rightly is reserved in his opinion regarding tuberculosis as predominantly the only factor in this question, though admitting the predominance of this ætiology. He gives a masterly review of our knowledge of this subject in his work.—F. H. P.]

PATHOGNOMIC SIGNS OF CONGENITAL SYPHILIS.—Dr. Silex (Berlin), in those children of two to four years and over where the diagnosis lies between congenital syphilis, scrofulosis and rachitis, and the history is unobtainable for various reasons, calls attention to the value of the pathognomic signs of the eyes, teeth and mouth. These little patients are usually ill-developed, backward in growth, with large heads and numerous groups of enlarged lymph-glands in the cervical region.

The eyes were found by Fournier, out of 212 cases, to be affected 101 times, all parts, excepting the lens, being liable to involvement. Interstitial keratitis is met with most frequently (62 to 83 per cent.). The presence of this affection justifies a suspicion of hereditary lues in a high degree, especially if

perforation of the tympanum, protrusion of the frontal eminences, cicatrices at the corners of the mouth or on the palate, peculiar formation of the teeth, diseases of the knee-joint, osseous diseases of the extremities, etc., be present. Episcleritis and iritis of syphilitic origin present nothing characteristic, though the ophthalmoscope reveals chorio-retinitis and diseases of the optic nerve in great number. Hirschberg has pointed out as characteristic of hereditary syphilis areolar retino-choroiditis where the fundus of the eye is scattered over with round and bright spots, which are flecked with seams and dots of pigment.

The *teeth* have been described by Hutchinson as characteristically altered in that the inner and upper incisors present a concave defect, a notch, in their middle. The French writers go still further, and Fournier regards erosions of the body of the tooth, as well as small and irregular teeth, as pathognomic of a syphilitic hereditary taint. The Germans do not look upon these forms as entirely conclusive, though Busch states that the *permanent* and not the milk teeth offer these defects. Silex regards erosions of the inner and upper incisors as decidedly pathognomic of hereditary syphilis. The syphilitic teeth are of a whitish-gray color and as they enter the gums have a dirty grayish-green appearance; in the middle of the anterior border of the cutting edge is a central notch. This point, with interstitial keratitis, is wholly indicative of congenital syphilis.

The *mouth* frequently is seen to be surrounded by radiating cicatricial lines, which course through the lips and out from the corners. Though they also may be due to former scrofulous eczema, etc., they generally are of hereditary syphilitic origin. They may anastomose with similar ones on the forehead, cheeks and lower jaw.—*Medizinische Neuigkeiten*, No. 16, 1896. [In the **HAHNEMANNIAN MONTHLY**, No. 3, 1896, is an abstract of an article on these cicatricial lines running in a radiating manner from the mouth of those with hereditary syphilis. Dr. Donner (homœopath), of Stuttgart, has written recently a very interesting work on the late forms of hereditary syphilis, with illustrative cases, which is very scientific and contains any amount of valuable information on this obscure subject.—F. H. P.]

DERMATITIS FROM THE X-RAYS.—Dr. E. Schrwald (Freiberg, i., B.) describes an interesting case in a boy of 13½ years, who, after 45 minutes' exposure to the Roentgen rays, 14 days after was affected with dermatitis, with hyperæmia, formation of papules and vesicles, accompanied by itching, which were followed by deep pigmentation of the involved area, loss of the lanugo hairs and a striking decrease of perspiration and the secretion of sebum. It greatly resembled chloasma caloricum. It required about a month wholly to disappear.—*Deutsche Medicinische Wochenschrift*, No. 41, 1896. [Dr. Marcuse—*Deutsche Medicinische Wochenschrift*, No. 30, 1896—has reported a similar case. Drs. Leppin—*Ibid.*, 1896, p. 454—and Fuchs—*Ibid.*, p. 569—have noted similar changes in the skin of adults after employing the X-rays. Such a case was recently reported in a newspaper in northern Ohio.—F. H. P.]

THE PROGNOSIS OF ALBUMINURIA.—Dr. Talamon (Paris), in a paper read before the third meeting of the French Congress of Internal Medicine, draws attention to five important symptoms to be considered in the prognosis of albuminuria.

1. The character of the albuminuria itself, the quantity, quality, its chemi-

cal composition and variations. A large quantity of albumin in the urine is of prognostic importance when it is constantly associated with polyuria, 2 to 4 litres. As to quality, the relative decrease of serin to globulin is always of ill omen, as well as where, with a very clear and transparent urine upon addition of nitric acid, a violet zone of indican forms below the white ring of contact and gradually spreads through this entire ring. The daily oscillations of the quantity of albumin are of no certain importance.

2. As to the chemical composition, it may be stated that with a large percentage of urea and scanty urine the prognosis is better and the disturbance of renal function less. With polyuria, a relative large percentage of urea denotes a satisfactory condition, while a slight proportion a tendency to cachexia. Casts associated with albuminuria are of prognostic value where certain forms are observed. Blood in the urine with albumin points to an acute stage, which is either primary or a recrudescence of a pre-existing renal disease.

3. The ætiology is important. Albuminuria associated with febrile diseases may be transitory, as it generally is, or it may be followed by chronic nephritis. Those varieties dependent upon a disturbance of the circulation, either of mechanical or nervous origin, have relatively favorable prognosis. In albuminuria with amyloid kidney the outlook is more gloomy. This is the case where it follows chronic and prolonged suppuration, syphilis or tuberculosis. In a third group of cases, where the disease has been brought about by poisons, as phosphorus, cantharides, etc., the prognosis depends upon the quantity of the drug ingested. In lead poisoning and gout all turns upon the duration of the disease or the length of time of poisoning.

4. Individual peculiarities, as age, heredity, etc., as well as the general state of nutrition, are to be thought of.

5. Complications, as cardiac insufficiency, a nervous disease, etc., also influence the prognosis. In the succeeding discussion, Tessier (Lyons) called attention to the outlook in intermittent albuminuria, especially with reference to marriage and life insurance. Cyclic albuminuria he regards as of gouty origin. It is either a predecessor of the disease or it appears in the children of gouty parents. It is a benign form of the disease. In 29 cases which he was able to follow for 13 years all remained alive. Pretuberculosis albuminuria is important, as it may signify a tubercular nephritis and be the precursor of a chronic albuminuria. In diabetes, albuminuria is found in 64 per cent. of the cases and either associating or alternating. If associated, it is a certain sign of an accompanying nephritis.—*Munchener Medicinische Wochenschrift*, No. 39, 1896.

INORGANIC HEART MURMURS.—Prof. Edgren (Stockholm), in a paper read before the Northern Congress for Internal Medicine, at its first meeting in Gothenburg, considered the subject of inorganic or accidental heart murmurs, which are frequently mistaken for inorganic varieties. The special anæmic murmurs *stand in no relation to the degree* of the anæmia, for they may only be observed when the disease is ameliorating. No pathognomic sign being known, they must be diagnosed from an examination of the patient and the disease as a whole. They are most frequently observed in nervous, youthful, anæmic and delicately built subjects; naturally, all signs of organic heart disease first must be excluded. Such murmurs are best audible from the

second to the fourth left ribs, either within, above or external to the apex, though, at times, they are most easily heard right over the apex. In this latter case it is difficult to distinguish from one due to mitral insufficiency. When heard towards the right side, they may be mistaken for an aortic insufficiency. It is most often systolic, though it may be diastolic, and, as a rule, very low in tone, when they may be confounded with a low-toned friction murmur. A characteristic diagnostic feature is their changeability. They may come and go from day to day. They are best heard in the recumbent position, and least so in the upright one. With inspiration, they decrease in intensity, though the contrary has been asserted by some observers; but, under all circumstances, this murmur is more dependent upon respiration than any other. It extends but little over the cardiac area. In spite of these signs its diagnosis may be difficult in a given case, and only possible after observation for a certain time.—*Norsk Magazin for Laegevidenskaben*, No. 9, 1896.

PSEUDO-MENINGITIS IN A CHILD FROM A VESICATORY.—Drs. Comby and Frenkel (Paris) have recently observed a little boy of four years, who was sent to the hospital with a diagnosis of meningitis, and who actually did present meningitic symptoms—stiffness of the neck, restlessness, delirium, together with anuria. On removing his clothing, the marks of two large blisters—one upon his back and the other upon his chest—were noticed, and it was afterwards learned that they had been kept on for four hours. Auscultation revealed only a few insignificant râles; temperature, 39° C. His kidneys did not functionate for several days, and the catheter drew off only a few drops of albuminous urine. Prolonged tepid baths and abundant drinks caused the anuria to yield in a few days, after which the meningitic symptoms also disappeared, but the fever persisted for over ten days. During convalescence he was emaciated, and scarcely was able to resist—not the insignificant disease—but the barbarous treatment to which he had been subjected. The writers warn against the indiscriminate use of cantharidal blisters in children as well as in adults. They also call attention to the possibility of cantharis producing a state resembling meningitis.—*La France Medicale*, No. 46, 1896. [Burt (*Physiological Materia Medica*, 1883, p. 247) states cantharis to have a strongly marked narcotic action on the cerebro-spinal system, as shown by the congestion and inflammation of the brain, delirium, stupor, dilated pupils, coma and, finally, death.—F. H. P.]

RECURRING INFECTIOUS ICTERUS.—Dr. Dalché (Paris) has observed a case of this disease (Weil's disease), which is characterized by a swelling of the liver, spleen, icterus and nephritis, which recurred twice. The patient, a woman 32 years of age, had fallen into the Seine and swallowed a great deal of water. Fourteen days after she was seized with the disease. He would attribute the cause to impure water, as Haas (Prague) and Pfuhl (Germany) have already done. It appears as a combination of typhoid fever and gastro-duodenal icterus. The writer does not regard the typhoid bacillus as the cause of the disease, though admittedly it is an infectious process.—*Muenchener Medicinische Wochenschrift*, No. 27, 1896. [Prof. Hanot (Paris) has observed the disease to follow the eating of shell-fish fourteen days after their ingestion. A recurrence presented the nervous symptoms more pronounced

than the primary disease. Other French writers have noticed it to appear with an incubation of ten to fourteen days after the drinking of polluted water or after eating spoiled meat.

FRANK H. PRITCHARD, M.D.

THE QUESTION OF POSITION IN THE TREATMENT OF FRACTURES OF THE LOWER END OF THE HUMERUS.—Powers reviews the question of the proper position of the elbow in fractures of the lower end of the humerus, and supplements his views with those of Hartley, Curtis and Van Arsdale. The total number of cases recorded by these gentlemen is 650. Powers concludes, as a result of this collective study, that "it is our opinion that the best results are obtained by treating the limb in the flexed position, and that the general practitioner will find the greatest degree of satisfaction in following this form of management."

The opinions in detail are :

Hartley and Woodbury (*Roosevelt Hospital*).—(a) Internal condyle-gypsum splints from fingers to shoulders, forearm semiprone, elbow at right angle; (b) external condyle—the same as the internal, except that the forearm is supinated; (c) transverse or T-shaped gypsum splint from finger to shoulder, or with shoulder spica, forearm supine, elbow at less than a right angle.

Curtis (*Chambers Street Hospital and the Vanderbilt Clinic*). Plaster-of-Paris bandage from fingers to axilla in most cases; occasionally when the superficial soft parts are impaired and need watching, a removable dressing with a wooden or tin splint. In the great majority of cases the limb is put with the elbow inside of a right angle, but not actually flexed, as the latter position would be less comfortable. The hand is in semipronation. When the "carrying point" is lost and it is difficult to restore it, owing to the slipping of the fragments, as usually occurs in fractures of the internal condyle, the limb is put up in full extension and supination, with particular attention to the "carrying point," for about two weeks, by which time the liability to lateral angular deformity has disappeared, and yet union is not so solid as to render it impossible to correct any outward displacement which might interfere with flexion. Then ether is again given, the elbow flexed inside of ninety degrees and a plaster splint applied, with careful attention to the position of the fragments. This splint is left in place until consolidation is complete.

Van Arsdale (*Good Samaritan Dispensary*).—In all cases flexion to ninety degrees or to eighty degrees; starch or pasteboard until the swelling abates, then the same or plaster-of-Paris for three or four weeks, according to age (until union is complete).

Powers (*Chambers Street and New York Hospital*).—"I have put the limb up in plaster-of-Paris at about ninety degrees when first seen, except in those cases in which a tendency to 'gun-stock' deformity is apparent. In these latter instances I have made the angle 135 degrees for ten days to two weeks, reduction being made under an anæsthetic, with careful attention to the 'carrying point,' and then changing the angle to 90 degrees or 80 degrees. I am convinced that the extended position is not necessary to the obtaining of suitable coapta of the fragments, and I am by no means sure that a moderate degree of cubitus varus is prejudicial to the usefulness of the limb, though I do not know that I am prepared to go quite so far as does Jones (*Liverpool*), who says that neither it nor cubitus valgus is of any consequence from either an æsthetic or a functional aspect."—*Medical Record*.

HIP-JOINT DISEASE.—In young children the very beginnings of hip-joint disease are announced by muscular twitchings during sleep: added to this, the subject is irritable, the secretions are disturbed, the appetite is fictitious, the muscles are flabby and shrunk away on the affected side, the countenance is pale and the signs of illness are very apparent. Soon follows a little limp in the gait, attended with pain in the knee or ankle-joint—not often in the hip. These pains are at first very slight, and may escape attention of the medical attendant. A rise of temperature will sometimes be noticed in the evening, and it may be continuous; toward the last of this stage more or less spasm of the muscles will have supervened.—*Medical Arena*.

THE TREATMENT OF ACUTE TRAUMATIC SEROUS SYNOVITIS BY ELASTIC PRESSURE.—The value of elastic pressure in the treatment of acute serous synovitis is, according to Marsh (London), worthy of more consideration than at present it receives. Many of the surgical text-books recommend cold applications and the immobilization of the injured joint till the acute stage is over, the treatment by elastic pressure receiving but scanty notice, if, indeed, it is mentioned at all.

Having, during the past twelve months, treated a considerable number of cases of acute synovitis following injury, Marsh has come to the conclusion that the method of treatment by elastic pressure gives, in the vast majority of cases, the best results, affording a more immediate relief of pain and a speedier cure. By elastic pressure the absorbent powers of the synovial membrane are stimulated, and thus the distension of the joint capsule, which is the chief cause of the pain, is rapidly relieved. By checking mobility, and affording a firm, uniform and even support to the injured tissues, it relieves the reflex spasm of the muscles acting on the joint.

And again, by supporting the blood-vessels, further effusion into the joint is prevented. The pressure should be perfectly uniform, gentle and elastic. All the hollows around the joint should be carefully packed with absorbent or wood wool, or, better still, sheep's wool, which retains its elasticity under pressure. Then several layers should be placed around, the whole extending for some distance above and below the joint, and over all a moderately tight bandage of elastic webbing. There is no need for a splint. The limb may be swung in a cradle or tied up in a cushion. The dressings should be taken down at the end of twenty-four hours, the joint passively moved and the pressure readjusted.

In cases of acute synovitis of the knee-joint following a primary dislocation of a semilunar cartilage, it seems desirable to keep the joint fixed for four or five days in order that, if possible, the displaced cartilage may become fixed. The results obtained by this method of treatment have been exceedingly satisfactory. The painful tension and reflex muscular spasm quickly disappear, and the effusion undergoes speedy absorption.—*The Lancet*.

H. L. NORTHROP, M.D.

EFFECT OF EARLY OPTIC ATROPHY UPON THE COURSE OF LOCOMOTOR ATAXIA.—Dr. P. Bailey, in an article on this subject, draws the following conclusions:

1. In about 75 per cent. of the cases of tabes in which optic atrophy is an early symptom some of the other tabetic symptoms may be late in appearing

or may not develop at all. This is especially the case in respect to the lighting pains and the inco-ordination of movement. The loss of knee jerk in such cases is very constant.

2. The most distressing symptoms may develop simultaneously with or immediately succeed the blindness.

3. The association with the optic atrophy of oculomotor palsies is without prognostic significance,

4. The subject will receive its best elucidation by the observation over long periods of time, of patients with "primary optic atrophy."—*Medical Record*, November 14th.

TREATMENT OF OTORRHOEA AND ITS IMPORTANCE.—Dr. Edward B. Dench, of New York county, presented a paper with this title. He said that a profuse, chronic, purulent discharge from the ear, which had lasted for more than two months, could be stated positively to come from the middle ear, and naturally the membrana tympani must present some opening. A scanty purulent discharge probably comes from the external meatus; if serous and scanty, more probably from the middle ear. Pressure in front of the tragus, or traction on the auricle in adults, would cause pain if the affection were situated in the external auditory canal; but in children this sign was not reliable, owing to the absence of a bony canal. A recent purulent otorrhœa might come from infection of the tissues about the meatus or infection of the tissues in the upper part of the tympanic cavity. Suppuration always implied destruction of tissue. Where drainage at the meatus was free, the discharge would cease as soon as the necrotic tissue had been discharged. If the drainage were not perfect, symptoms would arise from the retention of the secretions. The first object of treatment, therefore, should be to keep the canal free from the discharge, and the second should be to keep the parts in an aseptic condition. Gauze drainage, the speaker said, had not proved useful in his hands. He preferred frequent syringing out of the canal. The deeper portion of the canal could not be cleansed by syringing unless the auricle were drawn outward, upward and backward, by which the fibrous meatus is made to conform to the direction of the bony meatus. In children the auricle must be drawn outward, downward and backward. Peroxide of hydrogen should not be employed in these cases, (1) because of its irritating properties, and (2) because the quantity of gas liberated in conjunction with the purulent discharge might give rise to injurious pressure and rupture of the adhesions. Personally, he preferred a solution of bichloride of mercury, 1 to 3000 or 1 to 5000, injected at a temperature which is comfortable to the patient. Between the irrigations the canal should be kept aseptic by dropping into the ear a 1 to 3000 alcoholic solution of bichloride of mercury. Under no condition should the patient be allowed to plug the ear with cotton. This favors the formation of furuncles about the meatus. There was the same objection to the use of powders. Powdered boric acid, when mixed with the secretions from the ear, formed a hard plug in the canal. If granulation tissues obstructed the outflow of the secretions, they must, of course, be removed. There were two recognized methods of removing carious bone, viz.: (1) the removal through the canal, with thorough curetting of the ear, and (2) incision behind the ear, converting the tympanic cavity, the mastoid antrum and the canal into one. The latter was known as Stacke's operation. The results were about the same from

each method. The position taken by the author, that the aural discharge was of so much importance, he endeavored to justify by citing the statistics of various institutions. Thus, one observer had found that out of 820 cases of suppurative disease of the middle ear, 2.5 per cent. proved fatal.

THE RELATION OF AFFECTIONS OF THE UPPER AIR PASSAGES TO THE DISEASES OF THE EAR.—Dr. Frank S. Milbury, of Kings county, read this paper. After dwelling upon the importance of a knowledge of the condition of the upper air passages in determining the prognosis and treatment of ear affections, he spoke of the frequency with which middle-ear disease and deafness were due to stenosis of the nasal passages. It was known that intra-nasal surgery often improved the hearing and relieved tinnitus. Atropic rhinitis and naso-pharyngeal catarrh and enlargement of the tonsils were also responsible for some of the diseases of the ear. Adenoids, by plugging up the Eustachian orifices, caused rarefaction of the air in the middle-ear, and eventually resulted in chronic congestion of the membrana tympani. The author said he felt confident that if there were no diseases or malformations of the upper air passages there would be but little disease of the ear. Cases were cited in support of the view that many aural disorders were intimately associated with affections of the upper air passages.—*Med.-Chir. Bulletin*, Oct. 24, 1896.

OPHTHALMIC MIGRAINE.—Prof. Raymond (Paris) recently was consulted by a man on account of pains above the orbit accompanied with a distressing sensation of flashing in the right eye, with a scotoma and associated painful shocks in the right arm. A diagnosis of ophthalmic migraine was made. This disease, though sometimes symptomatic of organic cerebral affections, as general paralysis, cerebral hæmorrhage or softening of the brain, yet may be idiopathic and essentially be a larvated form of epilepsy. It may be associated with disorders of memory. This amnesia is variable, transitory, appearing during certain moments of the day and lasting one hour or even longer. Then the patient is unable to collect his thoughts and the amnesia is so total that he cannot recall what he has just done, written or said. It is unaccompanied by any sensory or motor symptoms and only with a general distress feeling of ill-at-ease. These disturbances disappearing, he is able to resume his work as before. Therefore, this disease is regarded as an epileptic equivalent.—*Revista Clínica E Terapeutica*, No. 7, 1896.

[Dr. D'Alche (*Ibid.*) states the characteristics of this symptom-complex to be a diffused one-sided headache accompanied by gastric symptoms and a paralysis of the motor oculi nerve. Though generally periodic, it has a tendency to become continuous with periodic exacerbations. It is to be distinguished from classic hemicrania, recurring paralysis from tumors of the brain, and especially those of the base or inflammatory processes of the meninges, as well as from periodic paralysis such as may appear in the course of certain spinal diseases, as tabes dorsalis and sclerosis en plaques.]

CHARLES M. THOMAS, M.D.

THE ORTHOSCOPE.—Dr. Katzenstein describes a new laryngeal mirror, the object of which is to obtain upright images of the larynx. He combines two mirrors in one instrument in the form of a prism. It does not interfere with its usefulness in introducing the instrument.

MONTHLY RETROSPECT.

OF HOMŒOPATHIC MATERIA MEDICA AND
THERAPEUTICS.

CANNABIS INDICA IN NERVOUS DISEASES.—As a stimulant to the nerve centres, that is, for its anodyne, antispasmodic, hypnotic, or narcotic effects, *cannabis indica* is a remedy that demands a foremost place in the treatment of many diseases. We are of the opinion that it is often overlooked or forgotten, when less worthy remedies are pushed in vain until baneful effects follow. Cannabis deserves a special place because of its soothing influence in the treatment of many nervous disorders, like epilepsy, catalepsy, acute mania, acute dementia; with bromide of potassium in softening of the brain, and in conditions involving anæmia of the cortex of the brain; in senile trembling and paralysis agitans; in delirium tremens and the delirium following fevers; in tetanus, either traumatic or idiopathic; in convulsions and in irritable reflexes generally.

It is well worthy of a trial in the treatment of migraine, of neuralgia, and of headache, whether it be due to fatigue, to menstrual, or to menopause wrongs—or even if it be due to the presence of tumors—Indian hemp will often bring satisfactory results. The same is true of it in the treatment of sciatica and chronic rheumatism, with depression, and in uterine wrongs, as amenorrhœas, sub-involution, and in endometritis. It will often avert an impending abortion, and even render the pain of cancer and locomotor ataxia bearable. It will lessen the troublesome manifestations of spinal meningitis, and ease the pains of a protracted labor in atonic women.—*Eclectic Medical Journal*.

REMEDIES FOR BACKACHE.—The following remedies, prescribed on purely symptomatic grounds, have been found useful by Tremaine (*Clinique*):

Aconite you will find especially helpful in plethoric women who have a bruised, sore, stiff back; pains as if beaten, after checked perspiration, after a sudden fright or vexation; leucorrhœa copious, tenacious, yellow.

Esculus hip.—Pain, mostly in the sacro-iliac region, with a dull weariness; moving about causes the back to “give out,” and unfits one for business; walking is almost impossible; the spine feels weak. You might expect to find an inflamed cervix, retroversion, prolapsus, great local tenderness, with heat and throbbing; a leucorrhœa of a dark yellow color, thick, sticky and acrid; the sacrum, back, neck, head, chest and abdomen all seem in sympathy with the rectum and its vessels. The patient is generally worse from cold air, washing in cold water and in the winter; generally better in summer.

Actea racemosa.—Violent ache in the small of the back; bearing-down pains dart from the uterus to the sides; weight in the uterus; pressure, as if something were passing out; leucorrhœa profuse. Mentally, she is despondent, and thinks she is going crazy. This remedy is similar to caulophyllum in uterine troubles.

Arnica is indicated mostly in traumatic cases, with the sore, bruised feeling all over.

Belladonna.—In this remedy the backaches are usually accompanied by headaches, with fever; all the pains are worse from the least jar or motion; the patient cannot lie, sit or stand with any degree of comfort.

Calcarea phos.—Backaches and headaches of school girls, especially during the catamenia. With this remedy there is mental anxiety with all the troubles. Has cured a number of cases of backache in young school-girls who were disappointed in their little love affairs, all their mental disappointment seeming to go to their backs.

Causticum.—The difference between this remedy and *bryonia* and *calcarea carb.* may be found in the general constitution. The pain is jerking, pulling, pressing, darting, gnawing in outside parts, with a sensation of bursting, burning in external parts, more often in the small of the back.

Cocculus.—Has a good deal of pain in the back, as if menses were coming on, with drawing, lacerating, boring pains; sensitiveness of the spine to touch; pains worse on walking and stooping. The symptoms of this remedy are more often found in light-haired women who are of a changeable, hypochondriacal humor, and sensitive to insults, slights and disappointments.

Nux vomica.—The patient cannot bear pain; is cross and irritable; the pain in the back is of a burning, tearing, drawing, lacerating or bruised character, with sudden stitches in the back on turning; has to sit up in bed to turn; pain in the small of the back, as if bruised or broken, which pains are generally worse in the early morning.

Pulsatilla.—As this symptom changes with every breath of the wind, and changes its position constantly, so do the symptoms which are characteristic of the drug. The pains are constantly flying from one portion of the body to another; the pains in the back are fine, sticking pains; stitches in the small of the back; tensive, drawing pains in the loins; bruised pain in the back while lying in bed, causing her to walk about. The patient is usually better from gentle exercise.

Rhus toxicodendron.—The thought of *rhus tox.*, together with the icy sidewalks of last Saturday evening, are enough to cause one to feel its typical pains, which are of a stiff, lame, bruised, dull, aching kind, better from motion; extended heat. The expression, "a violent pain, as though back were broken," describes the pain. Uterine complaint from exposure to cold, damp weather, from getting wet, particularly while perspiring.

Sepia.—Has the labor-like pains which are felt chiefly in the back, accompanied by a feeling as though she must cross the limbs and "sit close" to keep something from coming out through the vagina; pains in other parts of the body go to the back; sudden pain in back, as if struck with a hammer; pains are better by pressing the back against something hard; the backache causes nausea and a faint feeling when standing; the spine is tender to the touch.

Sulphur.—The patient does not walk erect, is stoop-shouldered, has pain if she straightens up, a gnawing, tiresome, sprained, sticking pain. Sometimes the colicky pains of dysmenorrhœa readily give way to sulphur. The stiff backs indicating sulphur are always worse before a storm.

THE ACTION OF GELSEMIUM ON THE NERVOUS CENTRES.—According to Formas, the normal balance of the heat regulating mechanism seems to be notably disordered by this drug, probably by a direct or reflex influence upon the nervous centres; or from changes in the state of the blood and circulation

supplying these centres, for its fever is sub-continuous, usually continued, of a low type, and with clear evidence of blood contamination (irritability and depression), such as vertigo, staggering, drowsiness, stupor, delirium, restlessness, wakefulness, trembling, tendency to convulsions, general aching, exhaustion, and loss of muscular power. In its evolution the fever exhibits protracted hyperthermia, slight morning remission, or regular periodicity every day at the same hour (*anon., ced.*)—*Hahn. Advocate*, June 15, 1896.

REMEDIES FOR TOOTHACHE.—Probably the remedy that is oftenest called for is *mercurius*. It is particularly adapted to the pain in decayed or carious teeth, pain that may not be confined to the affected teeth, but involve other parts of the head. The pain is worse from warmth, and eating and drinking, and may be relieved a little by cold applications, yet a draft of cold air will aggravate the pain. The gums are apt to be red and swollen; in some cases spongy, receding from the teeth and bleeding easily. This is a general picture of the toothache that a few doses of *mercurius* 6 will almost surely relieve.

Bryonia has a toothache all its own, a species of rheumatism of the teeth. There is no inflammation, but a tearing pain that may shift from one tooth to the others; sometimes there is a sensation of the teeth being loose or too long. Touching the teeth does not make them worse. Lying on the affected side is apt to relieve the pain a little.

A throbbing, violent pain, breaking out in paroxysms, red gums, red cheeks, congestion of the head, chill, heat and thirst is a call for *belladonna*. It is a toothache that is akin to neuralgia.

A toothache that goes through half the jaw, you cannot point out any particular offender, that is better in the open air and gets worse when entering a warm room; whose pain is apt to shoot into the eyes, ears, or temples; that shows no inflammation or swelling; whose victim is apt to be chilly; will be scattered by a few doses of *pulsatilla*.

A pain that is not throbbing, nor confined to one tooth, but seems to flash about, darting to other parts; that is better for warm applications, calls for *spigelia*.

A child gets the toothache in a warm bed; is nervous and restless; one cheek red; much saliva; *chamomilla* will probably give relief.

When toothache is caused by exposure to wet and cold, *rhus tox.* will cure it and other aches and pains from the same cause.—*Hom. Envoy*, May, 1896.

A VERIFICATION OF CANTHARIS.—Howard Crutcher, of Chicago, writes to the *Hah. Advocate* (August 15, 1896), as follows:

One afternoon in May I was engaged in preparing some catgut ligatures, when a jar of boiling alcohol exploded, the liquid at once igniting and burning quite seriously my right hand and wrist. The pain was something intense; the injured parts were at once covered with oil and bandages, but these applications gave no relief. *Cantharis* readily came to mind. The third dilution was put in water and applied to the parts. The relief was so prompt and complete that no reasonable person could doubt the remarkable efficiency of the remedy. Within five minutes my pain was gone entirely, and it never returned. From the severity of the burn I had firmly expected a crop of ugly blisters. Within six hours not a trace of discoloration was visible. With this experience in mind I shall use the remedy hereafter with perfect confidence before the expedients usually employed. F. MORTIMER LAWRENCE, M.D.

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A FEW THOUGHTS CONCERNING FRACTURES.

BY WILLIAM B. VAN LENNEP, A.M., M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania,
September 30, 1896.)

ANY discussion of the subject of fractures may seem superfluous, particularly to surgeons; but these cases are mostly treated by the general practitioner, especially the country doctor. The results of treatment are often far from satisfactory in any hands, as the limb is almost never as perfect in function and shape as before. I do not for a moment wish to be understood to assume any degree of perfection in my knowledge, or a superiority in my results with such cases; fractures are a greater source of anxiety to me, probably, than any form of surgical work coming under my care. How many so-called "sprained wrists" come out stiff, with an, alas, too late but undoubted evidence of unreduced impaction! How many ankles are deformed and impaired through a broadened joint and an unreduced backward luxation of the foot! Such results are due partly to errors in diagnosis, but especially to a lack of knowledge of the lesions and the correct principles of treatment. Without multiplying examples, I think I may be pardoned for

occupying the time of this society with a few thoughts concerning fractures.

The symptoms of fracture as ordinarily given in the books are too numerous to remember easily, and the average man looks for but one, *i.e.*, crepitus. As a matter of fact, crepitus is rarely necessary to a diagnosis, and the attempt to obtain it usually results in a flagrant violation of the golden rule of treatment, "be gentle."

The symptoms may be divided into two general classes, the subjective and the objective, of each of which there are three :

1. The history, pain, and loss of function ;
2. Deformity, abnormal mobility, and recurrence of the deformity after reduction.

In connection with the subjective symptoms, the method of examination is worthy of consideration. By quiet, systematic questioning to bring out the *history*, more than a tentative diagnosis can often be arrived at, to say nothing of quieting the patient's fears and winning a most necessary confidence. The character of the *pain* caused by the sharp ends of a broken bone, as distinguished from that of a luxation, a sprain, or a contusion, are familiar to all of us. The patient, too, may have felt a snap at the time of injury, or may describe the grating of the ends of the bone. *Loss of function*, present with but few exceptions, will also be brought out.

What can be more characteristic than the history of an old woman, a misstep, pain at the hip or referred down the thigh or to the knee, and usually complete loss of function. The diagnosis of intracapsular fracture only requires to be verified by looking for eversion of the foot, while the prognosis is settled by the presence or absence of shortening.

Under *deformity* come that of the limb, the local swelling and distortion, the late greenish-yellow ecchymoses, and the variations in length. In recognizing *abnormal mobility*, crepitus may incidentally be found. It is of use only in deep-seated or joint fractures where a diagnosis cannot otherwise be reached, and is more often to be looked for to prove the approximation of the broken ends during reduction. *Recurrence of the deformity* has but a very limited sphere.

The first step in the physical examination is *inspection*, which will show deformity, both local and of the limb. It is of much

more value when supplemented by *comparison* with the other limb or the other side of the body. A positive diagnosis can very frequently be arrived at by this alone. Closely allied to it is *mensuration*, by which the comparative length of limbs and the circumference of parts, as well as the relation of the numerous test-lines, are made out.

So far there has been no laying on of hands, no pain caused, and in the vast majority of cases only corroborative evidence is required from *palpation*. Hence this must be intelligent, with a certain object in view, and, above all, *gentle*. Occasionally *percussion* is of value, as, for instance, in fracture of the inaccessible shaft of the fibula.

In considering special fractures, it may be well to take them up in regions, or according to their frequency rather than in the text-book order.

Colles's fracture is probably one of the most frequently met with. We are taught to associate this injury with the familiar "silver-fork" deformity, which, when present, permits of a positive diagnosis by inspection alone (Fig. 1).

But this deformity is, unfortunately, either wholly or partly absent in that form of fracture at the lower end of the radius, which is far more common than is generally supposed, the impacted fracture, the usual appearance of which is that of a sprain with typical effusion and often even tendon grating (Fig. 11). In the absence of swelling, a bunching up of the lower end of the radius may be made out; but if we wait for the effusion to be absorbed it is next to impossible to break up the impaction, the leverage on the lower fragment being so small. Hence I have made it a rule in a case of wrist sprain, with or without bone deformity, to etherize the patient and attempt to break up an impaction. If the bone be intact, no harm is done, but if an impacted fracture is present deformity and mobility are produced. This fracture is the exception in the treatment of impactions.

A corroborative symptom in the diagnosis is the prominence of the styloid process of the ulna, producing a tendency in the hand to fall to the radial side, and a broadening of the wrist (Fig. 2). This is due to laceration of the radio-ulnar and lateral ligaments. The lesion has a later importance, because fibrous tissue heals more slowly and less firmly than bone, for,

at times, such a fracture will unite kindly, and the patient be discharged with an apparently perfect result only to return in a few weeks with a prominent ulnar styloid process and a consequent partial luxation of the wrist. It is but right to protect ourselves by warning patients against such a possibility, and to prevent it by means of a circular band.

Complete, accurate and early reduction of Colles's fracture is the all-important point in the treatment, some surgeons going so far as to advise no dressing, or, at most, a circular roller or adhesive strip. We should aim, besides, to preserve the arch under the radius, to prevent outward luxation of the ulna, and to keep the fingers moving to avoid tendinous adhesions. The Levis perforated tin splint, or the Carr splint, probably accomplish this better than any other, while the popular Bond splint tends to break the arch down, but, as a matter of economy and universality, plaster-of-Paris splints are just as serviceable (Fig. 3).

Fractures of the clavicle differ from those we have just considered in that function is usually good, no matter what the deformity. The great variety of dressings, devised to overcome this deformity, prove that no one fills the bill satisfactorily. The displacement, "downward, forward and inward," is so well known that the indications for treatment are clear. Probably the most successful plan is that used in young women who are willing to lie still for a couple of weeks with a stiff pillow under the well shoulder.

As regards ambulant treatment, I must confess to a decided prejudice against the axillary pad as applied in the Fox dressing and all its modifications. I was led to try the posterior figure-eight because it was the only dressing a medical superintendent could keep on his patients in an insane asylum. I have found it of especial value in children, and the first adult on whom I used it, an engineer, was able to drive his locomotive throughout the treatment. This dressing has the disadvantage, to a degree, of the axillary pad, although the pressure can be relieved by carrying the arms from the side. A few weeks ago I was forced to modify the principle of the figure-eight in a fracture of the clavicle in which all of the ordinary dressings had failed to overcome the deformity, and in which wounds of the anterior axillary folds precluded the use of the figure-eight. The shoulders were

drawn forcibly back until the over-riding was reduced, and held by a broad band of adhesive plaster, extending around from the front of one shoulder, across the back, to the front of the other. Fearing some drooping, I supplemented this with a sling of the elbow (Fig. 4).

In examining the shoulder, after the subjective symptoms are obtained, comparative inspection is of the greatest value—the hollow from dislocation, the extra joint in fracture at the neck, the sharp edge and depression of fracture of the acromion and dislocation of the scapula, and the positions of the arm in fracture and dislocation all being familiar. Then the comparative length of the arms is sought for by mensuration, and to this is added the comparative circumference of the two shoulders and the external plane of the arms. Lastly, the hands are gently laid on to find whether the head of the humerus is in place and moves with the shaft, whether the arm is abnormally mobile or immobile, and to palpate the clavicle, the acromion, the scapular spine and body and the coracoid process in thin subjects.

For practical purposes the fractures at the upper extremity of the humerus may be considered as the intra- and extra-capsular. The former are obscure joint injuries, fissured, comminuted or impacted, and occur in the old, or are produced by severe direct violence. Joint effusion and inflammation quickly follow and more or less stiffness usually results. The diagnosis has to depend on the history, exclusion, absence of motion in the head if complete, and principally on the recognition of deep-seated crepitus. The treatment is to bind the arm to the side, a sling of the hand, and the ice-bag to the joint.

Fracture of the surgical neck and the adjacent epiphyseal separation of the young, as well as the numerous breaks of the shaft, are readily diagnosed, and the minimum of damage done by the plan of examination already given. They are all treated by the internal angular splint, shoulder-cap or outside moulded splint and a sling. Occasionally adhesive plaster extension is necessary, or, better, approximation is obtained by the principle of the Stromeyer pad and Middeldorpf's triangle.

Two complications are to be looked for in fracture of the shaft: 1. Laceration of the musculo-spiral nerve or inclusion of the same in the callus, producing the characteristic wrist-

drop: and, 2, non-union, which, as is well known, is apt to be progressive, resulting in extensive defects. Both of these may require operative interference: nerve suture or liberation; or, besides the usual measures for non-union, bone transplantation. Fortunately, shortening is not as disabling in the upper as in the lower extremity.

Fracture with dislocation is often a very troublesome injury. It may be a primary lesion or the break may be produced while reducing a dislocation. It usually occurs near the surgical neck, although it may take place within the joint. In the latter case little else can be done than remove the loose fragment sooner or later; in the former the plan has been to get union and reduce the luxation afterwards if the primary attempts fail, to form a false joint, or to excise the upper fragment. McBurney has suggested an ingenious procedure which he has practised successfully. The upper fragment is exposed, a doubly-curved hook, with a long handle to give leverage, is introduced into a hole bored in the shaft, and the manipulations for the reduction of a dislocation are carried out. (He has since applied his plan to an ancient luxation without fracture, steadying the scapula with a similar hook inserted into its spine.)

Fracture of the neck of the scapula is looked upon as exceedingly rare, but I have not found it so. The symptoms are those of a downward dislocation, the arm, however, being, theoretically, limp at the side, instead of abducted and rigid. Reduction is easily accomplished by simply pushing the arm up or by the usual manipulations for a subglenoid luxation; but the deformity recurs and crepitus is elicited. That recurrence of deformity is not to be looked upon as pathognomonic is shown by some of the consecutive dislocations we meet with. I recall a case of subclavicular luxation which was brought to the subcoracoid position and then reduced by the Kocher method. On moving the arm the dislocation recurred, and was only completely reduced by first drawing the head into the axilla and then replacing it. The primary luxation was subglenoid, the secondary subcoracoid, and finally subclavicular. Such journeys are not uncommon. I feel that it is worth while to urge attention to the Kocher method in anterior luxations, and the principles of reduction by manipulation in the down-

ward and very rare backward dislocations, in view of the uncouth means so frequently employed.

The elbow is the peer at least of the shoulder in difficulties and in the number of its injuries; the surgical points being the position of the head of the radius, the inter-condyloid test-line, and mensuration of the arm and forearm.

Transverse fracture of the humerus, and its analogue, the separation of the lower epiphysis in children (Fig. 13) closely resemble backward dislocation of both bones, and some teach that recurrence after reduction is the distinctive point. With a chipped-off coronoid, a luxation, however, recurs. True, they are both reduced on the principle of traction in the direction of the deformity, but a diagnosis ought to be made before manipulations are begun. The relation of the head of the radius to the external epicondyle, and of the olecranon to the inter-condyloid test-line, the shortening of the arm in fracture and of the forearm in dislocation, will serve to distinguish most cases. Retention in either instance is accomplished by the anterior angular splint at first, and later by the internal angular.

Fractures of the internal condyle, aside from entering the joint, owe their importance to their tendency to destroy the carrying power of the arm, producing the well-known gun-stock deformity. They are recognized by obtaining independent mobility or deep crepitus and deformity, the fragment being forward while the ulna is displaced laterally. Considerable discussion has arisen as to whether they should be treated in the flexed or extended position. Personally I prefer a straight splint shaped on the well side to follow the carrying curve. This is turned around and applied to the injured limb with a generous padding opposite the joint to avoid complete extension (Fig. 5). In the course of two or three weeks an anterior, or, better, an internal right-angled splint can be substituted. In case of stiffening, the forearm is thus nearly in the ideal position for a stiff elbow.

The same splint, similarly padded, answers very well for fractures of the olecranon, aided, perhaps, by a retentive strip of adhesive plaster. I have on several occasions met with a fracture of the olecranon within the fibrous expansion of the triceps and without, at least, primary displacement. This should be looked for in injuries in this region. If compound or com-

minuted, fractures of the upper end of the ulna had better be wired.

The same violence that produces a Colles's fracture may fail at this point and splinter the head of the radius against the capitellum humeri. A much more important injury is the subluxation of the head of the radius produced by the common practice of lifting a child across a gutter by the hand; it cries and refuses to use the arm. Attention is not called to the injury, or it is overlooked by the physician. The deformity is slight flexion and pronation, with the head of the radius a little low. Reduction is accomplished by extreme supination, after which the arm is rested on an internal or anterior angular splint.

Fractures of the forearm are readily made out, the subcutaneous ulna and the non-rotating head of the radius, together with comparative mensuration of the bones, being the gentle, objective means of diagnosis. Interosseous callus, destroying pronation and supination is to be feared, and may be prevented by the position midway between the two, that is to say, on an internal angular splint with a straight dorsal one and the thumb pointing upward. Also by using wide splints, which do not allow lateral pressure by the bandage. Interosseous pads and non-elastic or tight dressings are to be avoided on account of the well-known tendency to gangrene in the forearm. This is probably due to the presence of what might be termed an internal splint formed by the two bones and the unyielding interosseous membrane.

Unnecessary though it may seem to some, I will take occasion in this connection to deprecate the use of the too frequently applied preliminary bandage. Its only sphere is to support the parts below a splint.

An exception to the above-mentioned position is met with in fractures of the radius above its middle, or above the insertion of the pronator radii teres. The supinators are not resisted, and the upper fragment besides being flexed, is rotated outward. Hence the primary dressing must be an anterior angular splint, the ideal internal angular being substituted later on.

It is worth while to remember that the radius is not only broken higher up than the ulna, but that its head is likely to be dislocated, forward most frequently, in fracture of its fellow.

About the ankle, the most common fractures are Pott's and those associated with sprains, "the sprain fractures." The latter owe their importance to the fact that they are overlooked and treated as sprains, the displacement being left unreduced, and stiffness of the joint, with subsequent eversion or inversion of the foot, resulting. In every case of sprain the malleoli should be carefully examined. If one is found to move, it is accurately "set," inflammation is controlled by the ice-bag, with the foot in a fracture box, and then a plaster cast applied during the balance of the healing.

Gibney has advocated the early or immediate use of adhesive plaster in sprained ankles. From an extended experience, I can most heartily endorse his plan, and have carried it farther by applying it to "sprain fracture." The foot is put up as for a sprain, particular attention being given to the strips over the broken malleolus, so as to hold the fragment in place. A starch or plaster cast is added, this being the only difference from the treatment of a sprain.

As regards Pott's fracture, Stimson has emphasized the resulting lesions, and suggested a valuable method of treatment, based upon an intelligent understanding of the same. The lesions are:

1. A fracture of the fibula two or three inches above the malleolus.
2. A break at the outer side of the lower end of the tibia, or a laceration of the tibio-fibular ligament.
3. A chipping off of the inner malleolus, or a laceration of the internal lateral ligament.

As a result, the foot is everted and displaced backward. The joint is broadened, both antero-posteriorly through the backward luxation, and laterally through a widening of the tibio-fibular mortice (Figs. 6 and 7).

By means of the Dupuytren splint, which is harsh and apt to make damaging pressure, the eversion is corrected, but the backward displacement is not necessarily overcome; in consequence, flexion of the foot is permanently impaired.

Reduction is accomplished by grasping the leg with one hand, taking the sole of the foot in the palm of the other. The foot is drawn forward and turned inward beyond the normal position. If chipped off, the inner malleolus is manipu-

lated into place, and it is very apt, sooner or later, to break through the skin. The retentive dressings consist of a posterior plaster-of-Paris splint from below the knee to beyond the tips of the toes. This prevents backward displacement. The inversion is held by a similar splint, starting on the dorsum of the foot, running around its outer side, across the sole and up the inner side of the leg to a corresponding height. They are held in place by a few circular turns at the foot, ankle and the upper end. In the course of three weeks a cast can be substituted, which gives the patient more freedom.

In my service at the Hahnemann Hospital and Dispensary, fractures of the upper extremity are almost all treated as out-patients. So crowded are the wards by the large accident material, that we keep most fractures below the femur but ten days or two weeks as in-patients. Fractures of the leg are put up in a fracture box with an ice-bag, and, as soon as the swelling is controlled or the wounds are healed, they are sent out in a cast and on crutches. One or two diagnostic points may be worthy of mention. The subcutaneous tibial crest makes the recognition of solutions of its continuity plainly visible or tangible to a gently palpating finger. Shortening can be recognized by seating the patient in a chair with the legs bare, and comparing the height of the knees (Fig. 8). Loss of function, *i.e.*, power to walk, is not necessarily absent even in fracture of both bones of the leg. Excessive manipulations to make out a coincident break in the fibula should be avoided. Percussion at one end of this bone, with a finger at the other, or pressure at one end to elicit pain at the point of fracture, will often settle the question. In fractures of the tibia a possible luxation of the head of the fibula should be looked for. I know of more than one instance in which this oversight has caused trouble for the physician.

The most frequent fractures about the knee are those of the patella (Fig. 9). The treatment of this lesion has, of late years, excited considerable discussion, and some have tried hard to popularize direct or indirect suture of the bone. In an impartial article, Bull has voiced the sentiment of most conservative surgeons, which is, that in spite of the improved methods of wound treatment, accidents do occur; that the union obtained is not, as a rule, as strong or any more service-

able than the fibrous union, even of considerable length, resulting from splint treatment, which is certainly the method for the great majority of practitioners. Operation is indicated in compound fractures, in refracture and in bad function from long fibrous union.

The treatment consists of the inclined plane and ice-bag at first, then a removable cast, in which the patient can go about on crutches, up to six weeks, and a posterior splint for six more; some protective apparatus for three months, and care, with gradual restoration of flexion to the end of the year.

I have used Gibney's adhesive treatment considerably and with gratifying results in the sprains of the knee so common among football players nowadays, and have applied the same dressing to fractures of the patella, adding the cast, of course. The use of adhesive plaster, by the way, can be extended to sprains in any part of the body, even to those annoying ones of the back. In these sprains, and particularly in fractures of the patella, the most important point is to prevent atrophy of the quadriceps extensor, some surgeons almost ignoring attempts at union for this.

I cannot leave the subject of the patella without referring to an oft-forgotten principle, simple though it may be, in the reduction of dislocations of this bone, *i.e.*, that it is a part of the quadriceps tendon. I have on several occasions been called to reduce luxations of the patella which had resisted pushing, pulling, twisting, and mauling for hours. By extending the leg and flexing the thigh it has of itself slipped into place.

A much more severe injury is the transverse fracture (rarely an epiphyseal separation) of the femur above the condyles. By the action of the gastrocnemius the lower fragment is apt to make destructive pressure upon the popliteal vessels. In my observation diagnostic manipulations and those directed towards reduction without recognizing the mechanism of the displacement have in several instances resulted in gangrene. Relaxation of the muscle by flexing the leg and the double inclined plane, aided at times by tenotomy of the tendo Achillis, and, above all, gentleness have been successful in my hands.

The presence of a longitudinal fracture making a T and entering the joint, or severe inflammation of the adjacent joint, are not infrequent complications, and require that the limb be put as soon as possible into the best position for a stiff knee.

There are two fractures at the hip which are both common and troublesome if not treated properly, the intracapsular, or more correctly, intra-articular, and the extra-capsular or extra-articular. Before considering these, let us recall for a moment the surgical points at the hip: Nelaton's test-line and Bryant's triangle to get the comparative height of the trochanters; the arc of rotation to obtain the comparative length of the femoral necks; mensuration for the comparative length of the two limbs; Allis's test for the rigidity of the fascia lata; and the position of the limb, and particularly of the foot—everted, inverted, fixed.

Intracapsular fracture is at first a partial one according to some, an impaction according to others. In a classical case the diagnosis is made by the history: an aged patient, usually a woman, a slight fall and indirect violence; by the pain at the hip, or more often down the thigh to the knee, frequently associated with muscular spasms; and by more or less loss of function. Inspection shows eversion of the limb; mensuration and the test-lines are practically negative. No other symptoms are necessary. Complete fracture, as shown by mensuration, Nelaton's and Bryant's lines, shortened arc of rotation, recurrence of the deformity, etc., indicates that treatment with a view to obtaining union is useless, and that comfort and preservation of life alone should be looked for.

If we do not try to know too much, and if the above treatment is carried out successfully, union of incomplete fracture in my experience has been the rule, and aside from the results of osteophytes and rheumatoid pains, function has been restored.

The same applies in a less degree to extra-capsular fractures. If impacted, as they usually are, and Nature has not splinted the limb in a useless position, her work should be left alone. The history is usually that of a younger patient, a direct and greater violence, localized pain and tenderness and less impairment of function. The trochanter is raised, the arc of rotation somewhat reduced, the limb perhaps slightly shortened, and the foot everted and more or less fixed. Abnormal mobility and crepitus are, of course, unnecessary, and attempts to obtain them dangerous.

In no class of fractures is a systematic and progressive examination, stopping even with a tentative diagnosis rather than do harm, of greater preventive value than in those of the hip.

Especially is this true because we are unable to say positively whether the break is inside or outside the joint in any given case.

Just below the hip, in the upper third of the thigh, is a fracture which often comes out badly. We are taught to treat these fractures with a flexed thigh, to raise the lower to the upper fragment, which is acted upon by the psoas and iliacus muscles. The deformity I have been troubled with during union has been a bowing outward, so that I have come to treat them with an inclined plane and an external splint, bringing the thigh down to the bed as soon as possible and continuing the long external splint with a steadying cross-piece at the foot.

Fractures of the femur in children I have treated by the excellent Hamilton splint, vertical suspension in the very young, and in the new-born by bandaging the thigh to the abdomen with anterior and posterior coaptation splints (Ellefsen).

I am frequently asked by recent graduates and practitioners to make them out a list of splints necessary for the average emergency. How many of us have been cajoled or browbeaten into buying complete sets of carved, felt, or other splints, which never fit the patients we try them on. The best use I have ever seen for such an armamentarium is that it was put to by a well-known colleague. He arranged and locked them in a plate-glass case in his front office and threw away the key. So, too, with the numerous internal and anterior and other wooden splints which are sold in the instrument shops. They have to be cut off to fit each case, and are thereafter unfit for any other. As a matter of convenience, as well as economy, I have had made a couple of metal pieces, one a rectangle and the other bent at a right angle, perforated with screw-holes, at a cost of 20 to 30 cents each (Fig. 10).

For a mere trifle any carpenter can make up a lot of thin pine boards, say 3, 2½ and 2 inches wide, and 18, 15, and 12 inches long respectively. The boards are cut to fit the limb and thrown away after union is complete, the metal pieces being used over and over again. With these boards, metal pieces, a few screws, a screw-driver and a small saw, in a cloth "lawyer's bag," we have a complete and inexpensive splint armamentarium.

For instance, two boards of appropriate length held together by a rectangular piece of metal make the ideal internal angular,

or, held by a right-angled one, the anterior angular splint (Fig. 10). By sawing one end to the requisite angle and uniting two boards with the straight holder, we can make a splint corresponding to the carrying power of the arm (Fig. 5). So, too, for the lower extremity, we can unite boards with the rectangular holders and fasten another across the lower end with the right-angled pieces, making a Hamilton splint, or unite several boards or bed-slats and attach a steadying cross foot piece in like manner for a long external splint. Short coaptation splints are either made by several of the narrow boards, by incorporating the same in a piece of cloth on the principle of the well-known dish-mat that rolls up, or by pieces of heavy cardboard. The last-named will also serve, as is well known, for the shoulder-cap and chin-trough. Plaster-of-Paris bandages, either prepared fresh or kept in hermetically-sealed boxes, will enable us to make all the moulded splints and every kind of cast. There only remain adhesive plaster, roller bandages and handkerchiefs.

I cannot leave the subject of fracture without referring to the treatment of the open or compound. While the general practitioner may decline to operate for an urgent appendicitis, a strangulated hernia, a broken skull, or even an emergency tracheotomy, while he may refuse to set and wire the fragments in a bad compound fracture, he is not excusable if he does not render such first aid to the injured as will prevent wound sepsis and make it possible to transform a compound into a simple fracture.

I well remember a bad compound fracture of the leg in the child of a prominent man in this city, which I was unable to see until the day after the accident. The attending physician had scrupulously disinfected the wounds and their vicinity both mechanically and chemically, and had occluded them with a bichloride dressing kept wet—nothing more. When the father complimented me on the result later on, I explained to him that it would have been impossible but for the intelligent preliminary treatment. And yet how often do ethics oblige surgeons to take the blame for suppuration, necrosis, deformity, and even loss of limb and life, when this very preliminary attention is neglected. In my experience, both in hospital and private practice, the transformation of a compound into a simple fracture has been the rule under such preliminary

treatment, and the fragments have usually been even more accurately set and held in place on account of the inspection, direct manipulation and internal splinting with silver wire, made possible by the wound. The details of a conscientious and painstaking antiseptic purification and occlusion are too well known to require repetition here. By such means alone can a complete condition of asepsis be induced in emergency practice.

Within a few months, a most valuable aid to the diagnosis and treatment of fractures has been developed in the X-rays, and particularly by the addition of Edison's fluoroscope. While I was enabled to obtain the well-known results in radiography, by means of the fluoroscope the apparatus has come to be of daily use in my office. The great drawback to the general adoption of the Roentgen rays is the expense; this I found to be particularly the case in the beginning of the *furore*, when I bought my first outfit. At the present rate of decrease, however, it will not be long before radioscopy will be available to all. The diagnosis of all fractures of the extremities is much facilitated, and, what is of more value, the position of the fragments can be inspected with the fluoroscope after the application of non-metallic splints. Subsequent taking down of the dressings, with its accompanying pain and disturbance, can thus be often avoided. So, too, the approximation of the fragments can be accurately accomplished under the guidance of the eye. Subjoined are a few illustrative radiographs (Figs. 11-14).

I have also observed what was, to me, a new property of the X-rays, a therapeutic one. The pains of periosteal and bone injuries seem to be arrested temporarily, at least, by their action. Whether such results will be permanent or not, time alone can show, but I have enough evidence to satisfy me that the plan is worthy of a more extended trial.

Since this paper was read I have had abundant opportunity to observe some of the trophic changes produced by the X-rays, in those who have been in frequent proximity with my outfit. They corroborate the recorded observations, such as blistering, gangrene, or atrophy of the skin; loss of hair in the hand, changes in the finger-nails, disturbances of vision, etc.

FIG. 1 is a Colles's fracture of the left radius, in a young and rather thin subject, taken immediately after the accident and before swelling had set in.

FIG. 2 is also a Colles's fracture, in a powerful man, some hours after the injury, and, therefore, the ulnar styloid process is not as prominent as it was at first. The displacement of the hand to the radial side has not been reduced by the weight of the arm, which is held up by the fingers.

FIG. 3 represents the plaster-of-Paris splints which have been allowed to harden on the limb while the deformities were held reduced. They are made by folding a wet plaster bandage forward and back to the desired length until the requisite thickness is obtained. It will be noted that the hand is carried to the ulnar side and that the arch under the radius is well supported. The padding has been purposely omitted to give a better view of the splints.

FIG. 4 is the dressing for fracture of the clavicle, of adhesive strips to pull the shoulder backward and outward, while it is held up by the Moore handkerchief sling, the application of which is readily seen.

FIG. 5 shows the adaptation of the writer's splint, shaped to preserve the "carrying power" of the arm, in a fracture of the internal condyle of the right humerus. The padding and bandage have been omitted for obvious reasons.

FIGS. 6 and 7 were taken just after the admission of a patient to the Hahnemann Hospital, who had sustained a Pott's fracture of the left ankle. In spite of the position of the limb, in FIG. 6, which partially reduced the backward luxation of the foot, the lower anterior edge of the tibia and fibula is still noticeable above the joint. The outward displacement of the foot appears in FIG. 7.

FIG. 8 is the photograph of an old fracture of both bones of the lower third of the left leg. It shows the difference in length between the limbs, obtained by seating the patient in a chair and comparing the height of the two knees. The ankle is broadened and the fibular malleolus is prominent. A well-marked *hallux valgus* and *hammer-toes* can also be seen on the injured side.

FIG. 9 was taken from a fracture of the left patella before effusion had obscured the lesion. The deformity has been intensified by partially flexing the leg.

FIG. 10 shows the writer's metal plates and the internal and anterior angular splints made by applying them to boards which may differ in length and width, according to the patient. FIG. 5 is another application as described.

FIG. 11 cleared up the condition in an obscure, impacted Colles's fracture treated in the orthopædic out patient department of the Hahnemann Hospital. The skiagraph was taken by an exposure of two minutes with a 6-inch coil supplied by storage batteries.

FIG. 12 was taken with a 10-inch coil, storage battery and three-and-a-half minutes' exposure. The patient, a child of four years, had sustained an epiphyseal separation at the lower end of the humerus, which had presumably been reduced. The splint, padding and bandage were in place, and the diagnosis was readily made with the fluoroscope. The olecranon epiphysis gives the impression of a separation there.

FIG. 13 shows an accurately set fracture of the tibia as seen through the dressings. The posterior perforated, metallic trough throws a distinct shadow. The skiagraph was the result of an hour's exposure, and was taken in March last with a 3-inch coil and the street current.

FIG. 14 enabled us to arrive at a diagnosis in a doubtful injury to the radius with localized pain, but no mobility. An impacted fracture is easily recognized. The skiagraph was taken last April with a 5-inch coil, the street current and 15 minutes' exposure.



FIG. 1.—Colles's fracture; silver fork deformity.

FIG. 2.—Colles's fracture; prominence of ulnar styloid; radial luxation of hand.

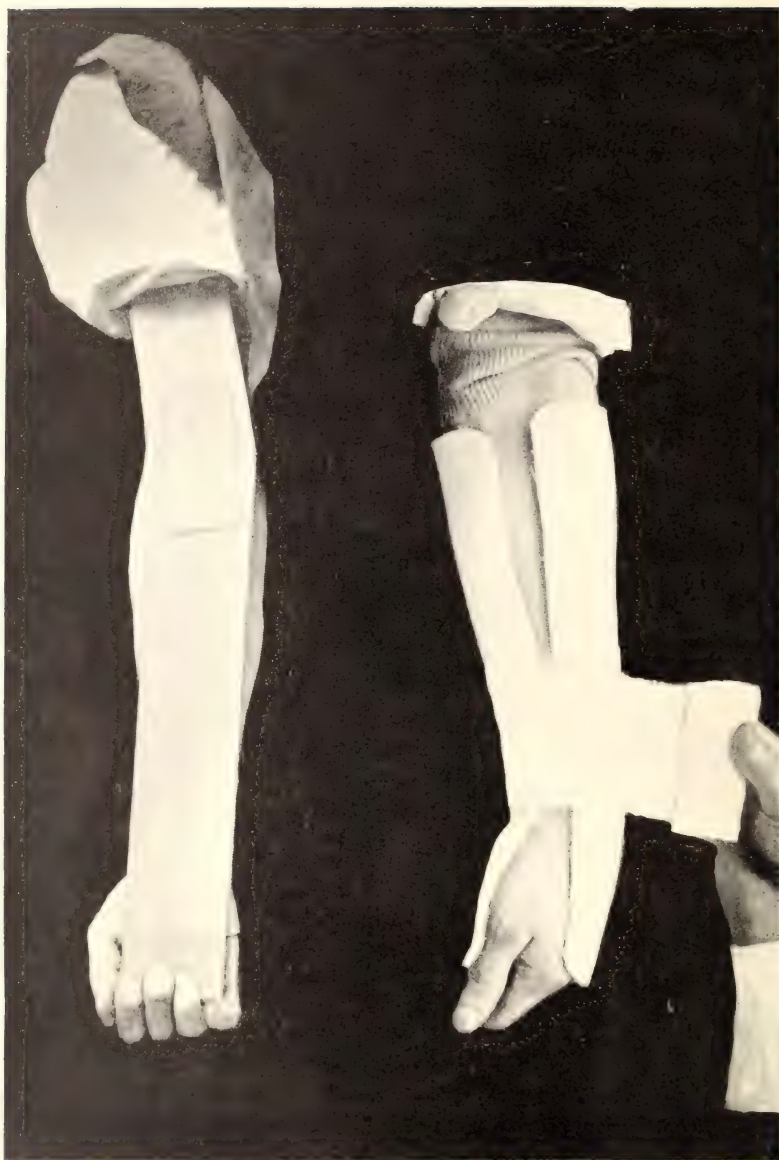


FIG. 5.—Straight anterior splint shaped to preserve "carrying power" of arm; padding omitted.

FIG. 3.—Colles's fracture; plaster-of-Paris splints; padding omitted.



FIG. 4.—Fracture of right clavicle ; adhesive plaster and sling dressing.



FIG. 6.—Pott's fracture; backward displacement of foot; antero-posterior broadening of ankle.

FIG. 7.—Pott's fracture; eversion of foot; widening of tibio-fibular mortise.



FIG. 8.—Comparative height of knees, to show shortening of leg.

FIG. 9.—Fracture of left patella, showing typical deformity produced by moderate flexion of leg and thigh.



FIG. 10.—Internal and anterior angular splints; rectangular and right-angled metal pieces.



FIG. 11.—Impacted Colles's fracture.

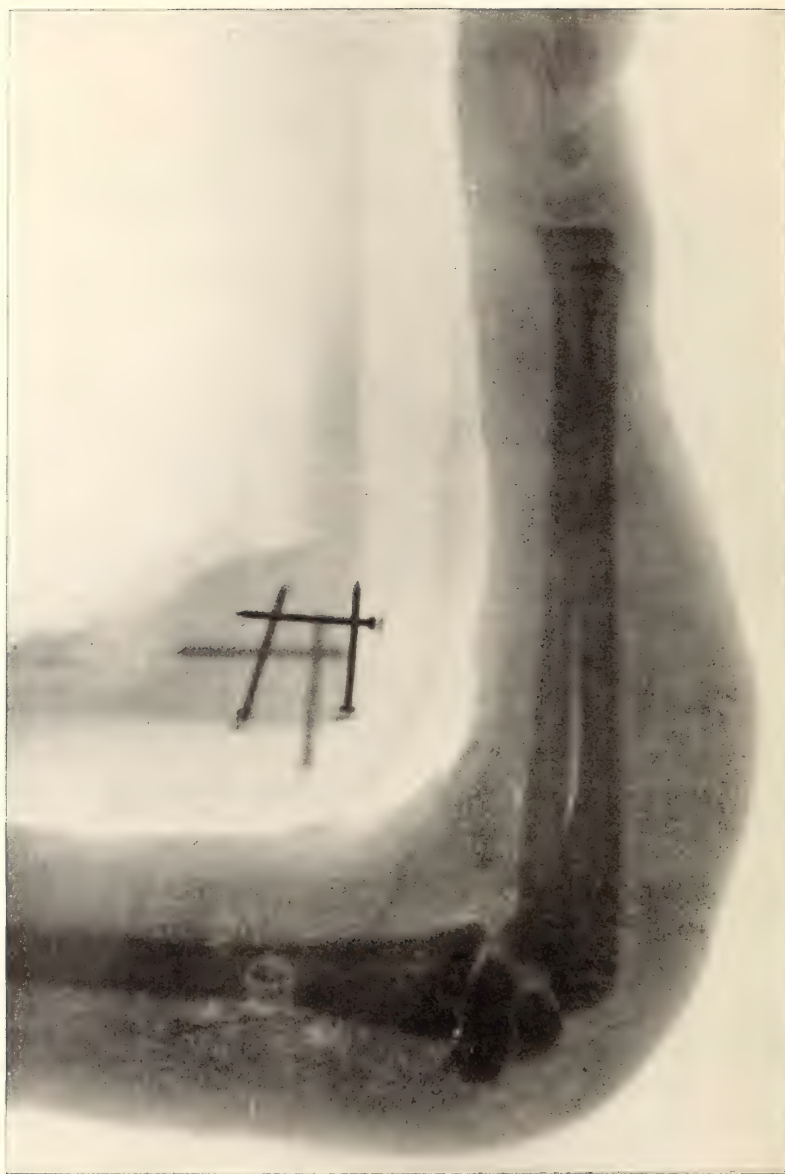


FIG. 12.—Separation of lower humeral epiphysis, as seen through the dressings.



FIG. 13.—Fracture of tibia, reduced and dressed.



FIG. 14.—Impacted fracture of radius.

SYSTEMATIC PROGRESS IN MEDICINE.

REGULATED DOSING AND DRUG PROVING—A PLEA FOR
UNIT PROVINGS.

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THE benefits derived by scientific medicine from the innovations of Hahnemann, without, I think, a single exception, can be referred to its having systematically laid down the principles upon which progress in medicine should proceed, the science of which has subsequently been highly enriched by such progress. He, so to speak, "gave the route" to those who wished to proceed along a road that was undeviating and clear, and that led to the wished-for termination. In this way true progress was brought about by this great reformer in medicine, and his method of procedure ought to be imitated by his followers when they strive to add to the immense advantages already secured.

My own conviction is that Hahnemann had it in his power to have removed many of the obscurities that have since his time hampered homœopathy, and that he did not consider it possible in the then state of medical opinion to do so; this, however, is simply an individual expression of opinion, and touches upon a subject that must be left for future discussion.

The important point to consider is the position of homœopathy at the present time, as a system of medicine, in regard especially to some of these obscurities. In order to do this, I purpose to take as the exponent of this position the paper read at the International Homœopathic Convention on "A Posological Law," by Dr. V. L. Simon, the well-known consulting physician of Paris.

It is begging the question to say, as it is possible some in argument may do, that this essay of Dr. Simon's is not a representative paper; it was accepted as such by those who spoke upon it before I myself had the pleasure of doing so at the Congress, or, to be precise, there was nothing in what those who succeeded me in the discussion said to hint at its being other than representative of modern homœopathic opinion.

This paper involves the idea of systematizing our doses and systematizing our provings, most important subjects of consideration, and ones that have long been *Quæstiones Veratæ* amongst us. It is upon these subjects I wish to dilate at present. To begin with, Dr. Simon tells us that, "according to the acknowledgment of one of Hahnemann's favorite disciples, the problem of posology has been badly stated in its fundamental principles;" a statement with which it is impossible to cavil. Nothing can be more true; time after time homœopathic practitioners have met and discussed this subject of the dose; and that they have stated the problem badly in its very fundamental principles is obviously true; the only thing to consider is whether there is any sign of their amending their ways, and for this we naturally turn to Dr. Simon's own essay. On the same, the first, page the statement meets us, in the third and fourth lines: "All doses are good, provided one knows how to give them at the right time;" than which I hardly think it possible to write anything more obscure or more misleading; and as if this were not sufficiently involved, we find the query in the order of business of the meeting, and for which Dr. Simon is not, I imagine, accountable: "Have we here or elsewhere a law of dose?" Not, be it remembered, of *a* dose, or *the* dose, or of *any* dose, but simply of *Dose*, as if there existed an abstract entity termed dose, for which we required a law. Surely our language must be more definite and accurate, or it is hopeless to attempt to evolve perspicuity from all this confusion.

Dr. Simon, in the essay before us, falls into this error from not following out his own dictum and stating the problem of dose clearly; the term posological law gives us no insight as to whether one or many doses is under discussion, and the term, "a law of dose," is equally if not more vague. The beginning and the end of the paper give us to suppose that many doses are meant, as is evident from the statement just quoted: "All doses are good," etc.; and, towards the end of the paper, from his making no distinction between one single dose and a series of doses; while confusion is still further increased by the information vouchsafed that the law formulated by him concerns the drug only, as if the very word dose did not suppose the existence of drugs, patient and disease.

This mode of dealing with the matter is not peculiar to Dr. Simon; it is simply characteristic of the confusion that exists; it is in the hope of being able to unravel the intricacies of the problem of the dose that I enter into this inquiry, which is intended as an extension of the work done in the essays published by me on "Arborivital Medicine" in *THE HAHNEMANNIAN MONTHLY* of January, etc., 1893, and on "The Dose-Frequency Law," March, 1893, and "One Dose, One Value," February, 1893, besides other papers, in *The Homœopathic World*.

Before it is possible to formulate a dose law—a posological law, if you will—it must be clearly understood what is meant by dose.

For myself, I know of but three forms of dose; that is to say, of curative dose, viz., the allopathic and the homœopathic and that brought forward by myself, and, of course, much less known, the arborivital dose. Leaving aside this last for the moment, let us inquire as to the former. Without being defined in so many words, the allopathic dose, as set forth in treatises of materia medica or of posology in the allopathic school, may be defined as the greatest quantity of a drug that can be given short of producing poisonous effect. This definition is not alone defensible, but is strictly in accordance with facts; thus, when the allopathic examiner requires of a student the dose of arsenic or of antimony, he is not satisfied unless an answer comes back that is near to, but not very far below, what would ordinarily be a dangerous dose.

It would occupy too much space to follow out the proof of the correctness of this definition, for which I hold myself accountable, and the necessity for which is plainly evidenced by Dr. Simon when he says that the dose of a homœopathic medicine should be proportioned to that which produces in a healthy man the group of symptoms which we wish to cure.

If this be indeed the correct homœopathic dose, our system is becoming nothing more than a reversion to allopathy; and he goes on to say, that "the therapeutic dose should be like the pathogenetic dose, with this restriction, that the first ought always to be lower than the second."

Dr. Simon here employs the term "pathogenetic" in the sense in which it is used by many other homœopathic practitioners, but which I protest against; namely, to mean that

certain quantities of drugs (doses) produce abnormal symptoms in a fairly uniform manner upon the healthy; there are doses that most certainly do so, but we are not in need of a coined word for such action, the proper and unmistakable adjective to apply to such quantity is that of "poisonous." No good can be gained by cloaking the reality in such a specious term as "pathogenetic." I do not know any reasonable objection to the use of the word poisonous, but if objection there be, then let us choose a word taken from the domain of allopathy and use the term "physiological."

The term "pathogenetic" is the creation of homœopathy, and is meant to be descriptive of facts revealed by homœopathy; it ought therefore to be restricted to the effects that ensue from infinitesimal and not from material doses upon the healthy.

Infinitesimal doses are known to disturb the healthy human system at times very remarkably, but seeing there is no uniformity about this disturbance, and that it is largely dependent upon the idiosyncrasy of the person experimented upon, there would be no justification for the application of the term "poisonous" to this action, and every reason why that of pathogenetic should be employed. It is a good old homœopathic word meant to refer to the great homœopathic truths; that provings ought to be undertaken before remedies are given to the sick, and that small doses act upon the healthy as well as in disease.

Having defined an allopathic dose, it will be perfectly evident that it is impossible to formulate any law of the dose in accordance with this definition. For the idea here has to do with quantity, and quantity alone, and this quantity is ever shifting, and is directed to the protection from injury to the patient as much as to the cure of his disease. Therefore, whatever the law of the dose may be, it is evident the law cannot have reference to the quantity of the dose, if by the term dose we mean an allopathic dose.

Next let us consider the Homœopathic Dose. Writers have been so shifty in their way of expressing themselves in regard to a homœopathic dose that though the term is often used, it has never, that I know of, been defined. The term homœopathic dose is vaguely connected with something extremely minute, infinitesimal in fact, but almost all advocates of homœo-

opathy, Dr. Simon included, wish the term to have reference not alone to infinitesimal but to widely different quantities of drugs. No progress therefore can be possible without a definition, and my definition is this: A homœopathic dose is the smallest quantity of a drug by which a cure of a disease can be effected.

As, however, opinions differ widely as to what this least quantity is, a difference arising not alone from the nature of the drug, but from the nature of the disease as well, it is evident that no law can be formulated having reference to quantity for this homœopathic dose, any more than for the allopathic dose.

The fact is we have to consider not alone the question of quantity, which is obviously a shifting basis, but as well the question of the disease, which also is ever varying, often intangible, and subject to all kinds of irregularities.

If, therefore, we are to proceed with advantage, we must curtail, circumscribe, and, as far as the nature of things will allow, isolate the basis upon which a law ought, so to speak, to be erected.

A law, then, cannot advantageously or correctly be formulated for an allopathic dose or for a homœopathic dose.

We are therefore driven to inquire whether a law can be framed for the third kind of dose, the Arborivital.

But before proceeding, it is necessary to keep clearly in mind what is meant by the abstract term "dose," apart from such qualifying terms as allopathic, homœopathic, or arborivital. By "dose" I mean a portion of a drug given with beneficial intent in disease. The dose then, in this sense, relates only to the alleviation or cure of disease. As yet there has been no intention of dealing with the pathogenetic dose, *i.e.*, a dose given with disease-producing intent, a law for a disease-producing dose is, for the present, not under consideration.

The dose for which a law is in demand must be given with direct or indirect curative intent. Our object obviously in framing a law is to render the dose curative; the requirement is to start with certainty of what is to follow when treating disease.

What is an Arborivital Dose?

It is simply a single drop of the preserved juice of a fresh plant that is allowed to expend its action till no evidence is forthcoming of this action.

The basis of this dose, therefore, and on which it is proposed to formulate a law, is stationary; the quantity is sufficiently unvarying for our purpose. The difficulty therefore of quantity is overcome; in this important particular the arborivital dose meets requirements.

But the term dose necessarily implies not alone the quantity of the medicinal agent, but in practice connects itself with the disease and with the patient.

Now disease is divisible into two great classes, acute disease and chronic disease; the first instable, varying and attended with urgency; its tendency is to be immediately dangerous to life.

Chronic disease, on the contrary, is fairly stable, little varying, and not attended with immediate urgency.

I hold that we cannot stand by and watch the progress of cases of acute diseases running a course untreated. It is cruel, it is unjustifiable; so that when Dr. Conrad Wesselhoeft in the *HAHNEMANNIAN MONTHLY* for August, 1896, in his paper on "Solution of Questions of Science," states that: "In order to prove that a case has been cured by medicine, it is first to be shown conclusively that the case could not have recovered or have been shortened without the use of medicine." He lays down conditions obtainable only in respect of chronic disease; and when he goes on to say: "Let it be resolved or ordered by this Institute" (the National Medical Conference, Detroit, June 16, 1896), "for instance, that all or a certain class of acute cases, say pneumonia or typhoids in these hospitals (homœopathic hospitals), should be observed for several years without any medicine whatever," he proposes an amount of cruelty perfectly unjustifiable: for even in the present allopathic treatment of acute disease, symptoms are being relieved by medicinal treatment, and far less questionable proceedings prevail in the ordinary hospitals than in Hahnemann's time. As long as urgency exists, disease cannot remain untreated; in fact, the English law condemns as criminals the members of the Peculiar People, a sect that prevails very largely in the County of Essex, for leaving their children go untreated.

But besides this, the time it will take to procure "a fair number of hundreds" of well-reported cases of pneumonia and typhoid fever to meet requirements will certainly extend to the termination of another century.

The arborivital dose, as originally suggested by me, had reference to chronic disease, the intention being to test the power of such single dose in diseases unattended with any great urgency; in other words, not likely to be immediately fatal.

Working with such a dose, undiluted and undynamized, upon this class of disease, I found results far more satisfactory than had hitherto been suspected, and consequently I was enabled to formulate a law agreeably with the facts observed.

This law is what I have termed the Dose-Frequency Law, and may be thus expressed: In expending its action upon disease the curative dose requires time to act proportionately to the duration of the disease, modified somewhat by the age of the patient; or, as I have expressed it: "The true curative principle of a drug when administered requires to be given in single dose, and this dose must be repeated in a measure proportionate to the duration of the disease" (*vide Homœopathic World*, March, 1893, p. 119).

The true law of the dose has reference, therefore, in the first place, to the frequency of repetition, and not to the quantity of the drug. Dr. Leon Simon's essay proves very clearly that any law of the dose founded upon quantity is defective; for, after formulating such a law, he himself admits that "the preceding rule," or, as he in another place terms it, "posological law, concerns the drug only," and rightly acknowledges that this is a deficiency.

The object of having a law of the dose is to point out the reciprocal relationship between the dose and the disease upon which it has to act, and this desideratum is most certainly met by the dose-frequency law; it is not met by any other law of the dose that I know of.

The idea underlying the term arborivital dose is that, quite apart from succussion and dilution, there is a power in plant-remedies which will carry on its action over a considerable period of time, and that this power is not to be measured by the quantity of material in the dose, but that it is brought into demonstrable activity by a reciprocal influence existing between the drug and the disease.

Proof of this was furnished in a pamphlet published by me on arborivital medicine,* as well as in other works.

* *Arborivital Medicine*, John Bale & Sons. London. 1893. Where a case of

But it is evident that there is developed in dry, lifeless, and apparently inert substances a power unsuspected until Hahnemann's time, the existence of which has since then been acknowledged by thousands of medical observers.

It has also been widely observed that single doses of these specially prepared dynamized remedies of Hahnemann exert a powerful effect in disease; my conviction is that they are in fact units of force, and that from these units result the truest and most direct cures of disease.

It is evident that single doses of drugs that are dynamized act conformably with the law expressed regarding the arborivital dose. In fact, it is possible to formulate a law in reference to the unit dose, and the unit dose only, included in which is, as explained, the arborivital dose.

Thus far I have dealt with the dose in regard to its agency in controlling disease; but it is evident that the term dose is applied to a disease producing factor, as well as to that of a disease benefiting one. Considering the importance of our provings or pathogeneses, it is very desirable that attention be paid to this aspect of the question. Here, as before stated, it is less necessary to formulate a dose law; a law was required where a difficulty existed, the difficulty being the cure of chronic disease.

No law is required where no difficulty exists, and there is practically no difficulty in producing disease.

The difficulty is in producing abnormal symptoms, or actual disease, in a way that while not permanently hurtful to the person voluntarily submitting to be experimented upon, will, all the same, furnish facts easily available as indications for the treatment of disease. Obviously in this connection the meaning attachable to the term dose becomes completely changed; the dose now being that portion of a drug that is given with the object of producing disease, or symptoms that are not the usual accompaniments of health.

Our object is to render the dose usefully pathogenetic, and no attempt at certainty of result is made.

The point to be investigated is the systematizing of the results

vascular deafness is given that would certainly have proved incurable with repeated doses of the remedy employed, namely, atropia, belladonna, etc.

of our methods of dosing, so that our provings may represent accurate knowledge of drug-action.

The dose now is of subordinate importance, for it may or it may not be followed by symptoms; we, in fact, start with uncertainty, and the important matter is not the dose, but our method of dosing.

The act of dosing of the healthy body, if followed by abnormal symptoms, constitutes a proving; and that form of proving that is followed by the clearest medicinal symptoms is the most useful for furnishing indications for use in disease.

Provings, it is obvious, may be undertaken with material doses of drugs, and which will include accidental and suicidal poisonings, or heroic voluntary experiments, the doses being single or frequently repeated. To such provings as these I propose the term *venenum provings*, the ordinary term poisoning being insufficient or objectionable; or provings may be undertaken with infinitesimal doses, where also the doses may be repeated or single, and to these I would give simply the term *homœopathic provings*, a homœopathic dose being one, in this connection, that has no demonstrable material. Or provings may be undertaken with single doses only of drugs, in which case I would apply the term *unit provings*.

Experiment has taught us that provings may be obtained from every method of dosing, whether the dosing be by quick succession of doses, doses at long intervals, or by single doses. This was known before the introduction of homœopathy, and this possibility is recognized in our first form of proving, the *venenum proving*.

But homœopathy has revealed the fact that whether given singly or in succession the minutest possible particles of substances, if in a state of special preparation, may produce pathogenetic effects, these effects being consequent upon the mode of preparation. Hence the term homœopathic is associated with these facts, and is applicable to our second form of proving.

The unit proving not alone meets the fact revealed in homœopathy, that minute single doses of specially prepared substances may be followed by abnormal symptoms, but it meets the great facts insisted upon by myself, that single drops of living plants, not subjected to any special preparation, are often followed by

great and beneficial change in the human body not obtainable in any other way, this change being obviously brought about by a hidden power possessed by the plant itself, and which I presume to be the growth force of the plant, or which, if thought more desirable, may be denominated plant force.

The necessity, therefore, for the unit proving is obvious; it requires our dynamized drugs to be proved in a way different from what has hitherto prevailed, viz., from beginning to end in single doses only, and it demands a change in our method of proving undynamized plant remedies. In this way it adds new pathogenetic procedures without in any way interfering with the methods hitherto adopted.

How frequently these unit doses are to be repeated will depend upon the preliminary "Aggravation," or, as I would term it, the *Curative Thrill*, the term aggravation being most misleading. Thus Dr. Simon states at pages 7 and 8 of his essay: "There are some substances which give rise to the same train of symptoms in whatever quantity they are given. . . . In these the choice of the dose is of less consequence; it is of paramount importance to avoid perturbing effects, what in our school we call 'aggravations.'"

To my mind the preliminary thrill ought to be sought for in all cases of chronic disease, and our dose should be so adjusted as to allow this disturbance to expend itself. Dr. Simon evidently had in his mind the pernicious aggravation of allopathy, and not the curative aggravation, as it is understood in our school of medicine, and he thus makes an error by no means an uncommon one. The possibility of misconception justifies a correction in our language; and, besides, the term "Aggravation" can have no application to the production of abnormal symptoms in health; in fact, no pathogenetic application.

In many instances, as can readily be supposed, no appreciable effects will follow from a single dose; and though in such cases it is not desirable to give a second dose of the same drug within a short interval, a week should elapse before a second one is partaken of; while, should distinctly medicinal symptoms proceed from the first dose, these disturbances, constituting now the pathogenetic thrill, ought to be allowed to exhaust themselves before any further experiment is made upon the same patient.

Many reputable homœopathic practitioners have testified to the unmistakable benefits that are to be gained by single doses of drugs in disease. It is due to them, if for no other reason, that systematic experiments should be undertaken, so that we can make trials on the healthy in uniformity with their clinical experiences.

With reference to the effects of drugs in chronic disease, my own conviction, and in this I am by no means alone, is that the indicated dose very soon gives evidence of recognizable curative power, and that a dose that furnishes this evidence ought never to be interfered with until all signs of its action have vanished, not even by successive doses of the same drug, much less by doses of other drugs; and that in this way it is possible to obtain unmistakable evidence in clinical practice of true curative action.

If this be true, it will follow that it is simply imperative that these unit doses should be proved in health in a way commensurate with their importance; hence the necessity for the unit proving.

The venenum provings furnish very few reliable indications for the prescription of remedies, at all events in chronic disease. A large amount of any indigestible substance may upset the stomach, but it does not follow that the resulting indigestion symptoms are characteristic of the true "*inwardness*" of action of the drug.

Poisonings by large quantities, in single doses, of carbolic acid, by chloroform, and by ether, are matters of daily occurrence, but I have yet to learn that reliable indications for obtaining the true curative action of these drugs in disease have thus far been obtained in this way; so that unless the single dose is one small enough not to corrode the primæ viæ or otherwise alter the constituents of the digestive juices, or at once to vitiate the fluids of the body, the immediately developed symptoms must be doubtful representatives of the drug's true dynamic energies.

It is different when successive fairly large doses are given to the healthy; but besides the difficulty of getting anybody to submit to provings that are leading to the gradual infection of the system by material particles of hurtful drugs, there is the objection that the doses succeeding the first ones may divert or

symptomatically alter the disturbances that these first ones had set a-going.

To develop gross pathological change in the healthy, rapidly succeeding material doses may be necessary; but surely, symptoms, before they can be recognized as abnormal, must be diagnosed as such, and diagnosis ought as easily to determine whether they are, or are not, prodromic of a tissue change.

Even should a drug produce gross pathological change, further study in the form of clinical investigation will have to be made use of to show that this change of structure constitutes an indication for the prescription of the drug to the afflicted; and the same applies to mere symptoms if produced in the healthy; a further study of these, in disease, is required to confirm their utility.

Let us clearly understand the position; the most important thing to be aimed at in proving medicines is a precise and extensive knowledge of the true *Curative Action of Drugs*; this curative action, an action disproportionate to a drug's material particles, was unsuspected before Hahnemann's time, and it is that upon which Hahnemann lays such stress throughout his writings and which is of such exceeding use to us in effecting the complete elimination of chronic disease.

As regards this curative action, it is important to keep in mind the multiplicity of the manifestations of this power, and that its prolonged efficacy as a curative agent, when once set a-going in the system, cannot be gauged by the mere amount of material instilled into the system. This has been proved repeatedly, and is acknowledged by Dr. Simon in his quotation from Attomyr; thus Simon states: "Attomyr has well expressed the defects of this method of viewing the question: 'Above all, we have been at great pains to determine what is a strong or a weak dose, and our labor has resulted in nothing. We have been all astray in our interpretation of the various actions of high and low dilutions, in saying that the difference consisted in strength or weakness. Therapeutics, in fact, has no concern in distinguishing between doses that are *strong* and doses that are *weak*, for through our knowledge of the law of similars, we know that disease does not call for *strong* or *weak* doses to correspond with its own strength or weakness, we have recognized that we have been going the wrong way to work

and that the numerous discussions in which we are occupied leave still undecided the question whether the thirtieth dilution is more, or less, energetic than the third.' ”

This statement of Attomyr's is, I need hardly say, most important, and entirely in accordance with facts.

We get into hopeless confusion without keeping this in mind, and Dr. Simon's law cannot possibly apply to the manifestations of this power, seeing how independent the power is declared to be of material. The disproportion between the manifestations of this power and its subtending envelope, both in health and in disease, has been proved beyond question by the Homœopathic School.

But not alone is this curative power remarkable for its intensity, but as well for the considerable time it occupies in manifesting its agency when working upon disease.

It is this duration of its action, upon which, more particularly, little or no light has been thrown since Hahnemann's time.

Hahnemann states that belladonna, for instance, acts from one day to eighteen months, and he probably meant that it acts both in disease and in health for this period, but whether this be his meaning or not, there have been no systematic experiments that I know of to determine either whether this great duration of the action of drugs applies only to health, or whether drugs continue to act over such a long period in disease.

My own feeling is that the working duration of the true curative action is determinable by the nature of the disease upon which a drug exerts its power and the length of time during which this disease had existed, and that when we find a very prolonged action in an apparently healthy person, to follow from the administration of a single dose, the unusual lengthening out of this action is due to the presence of hidden but undiagnosable disease existing in the supposedly healthy person.

Whether right or wrong in my surmise, one thing is perfectly certain, that the prolongation of the action of drugs, whether it be due to the properties that single doses of drugs possess, of disturbing for a long period the perfectly healthy organism, or to a reciprocal relationship between drugs and disease already implanted in the system, can only be determined by systematically undertaken UNIT PROVINGS.

THE RELATION OF THE PANCREAS TO DIABETES MELLITUS.

BY F. MORTIMER LAWRENCE, M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania,
September 30, 1896.)

IN no department of research, possibly excepting that of the nervous system, have the investigations of modern physiologists been more richly rewarded than in the attempt to explain the functions of the glands of the human body. For instance, in the undergraduate days of even the younger of us the lecturer passed over the functions of the thyroid with scarcely more than a surmise as to its part in the economy of life; and yet to-day physiology and pathology have united with therapeutics in attributing to it an importance second only to that of the heart itself. Not only has pathology asserted that its failure to empty a normal amount of a yet unknown ferment into the circulation will produce myxœdema, but therapeutics has proven it so by repeatedly curing myxœdema by means of thyroid-feeding. And in addition, neurology stands ready to disclaim the purely neurotic origin of exophthalmic goitre, attributing it instead to an over-secretion on the part of the thyroid—to be cured, other means failing, by the removal of a portion of that gland.

But it is not with the thyroid, but with the pancreas in its relation to diabetes mellitus, that this paper treats. As is well known, we have a number of distinct pathological conditions which clinically express themselves by glycosuria, and in consequence are still classified under the generic term of diabetes mellitus. Etiologically, however, these forms are widely separated: among others we have the cerebral, experimentally produced by irritation of the floor of the fourth ventricle, the dietetic, the hepatic and the pancreatic. All, as I have said, are characterized by sugar in the urine, but beyond that they have so little in common that our present nomenclature is disastrously confusing. The prognosis varies as widely as the ætiology, according to the form; and certainly there can be no scientific treatment until the latter is taken into account.

Until very recent years our knowledge of the pancreas was confined to that of the triple action of its juice in the digestive

process. Then by degrees it was learned that in some indefinite way it was occasionally associated with the phenomenon of glycosuria. As long ago as 1877 Prof. Lancereaux exhibited before the Paris Academy morbid specimens of the spleen from diabetics, and two years later Lapierre confirmed his observations. The latter demonstrated that out of twenty fatal cases fourteen showed atrophy of the pancreas. Year by year other eminent investigators have embraced this view, until now it may be said to be the accepted theory that true diabetes mellitus invariably results from degenerative or destructive lesions of the pancreas, as the result of which it is rendered impossible for that gland to empty into the circulation a glycolytic ferment whose presence in the blood in some way determines the destruction of its normally-contained sugar.

The results of all recent experimentation on the lower animals but tend to confirm us in this view. For instance, Prof. Lepine has recorded forty cases of removal of the pancreas in dogs, in all of which he noted the appearance of sugar in the urine within forty-eight hours, and the condition was permanent. "He believes that the blood has the power of constantly destroying glucose by the action of a ferment made in the pancreas (glycolytic ferment). This ferment is diminished in diseases of the pancreas, and wanting when that gland is destroyed."

Numerous other investigators have come to similar conclusions. Hedon excised the pancreas in twenty-two dogs, and in each case diabetic urine was passed the following day, and this persisted until death, with all the symptoms of saccharine diabetes. According to Minkowsky diabetes never fails to follow complete removal of the pancreas. This statement is founded upon fifty-five experiments on dogs: three times only did sugar fail to appear in the urine, and in these cases the dogs succumbed in the first twenty-four hours. Moreover, this experimenter demonstrated that if a portion of the pancreas was transplanted beneath the peritonæum of one of these animals glycosuria was averted, and would appear only upon the removal of the transplanted organ.

The causes of pancreatic destruction in the human being vary from proliferation of connective tissue to tumors and calculi, but by far the most common condition is that of simple atrophy. So many similar observations have been reported that I might

greatly multiply the proofs showing that such a condition inevitably results in diabetes mellitus. Moreover, although it is impossible of invariable demonstration, I believe that we are justified in considering every case of grave (lean) diabetes to be associated with pancreatic changes which prevent the normal secretion of sugar-destroying ferment.

"But," you will ask, "does this knowledge bring us any nearer to that goal of all true medical progress, the cure of a hitherto hopeless disease?" If analogy counts for anything, assuredly it does. As in the case of the thyroid, the results of drug treatment give us little encouragement: the best they can offer will be an arrest of the morbid process. But a perfectly rational treatment, and a hopeful one, offers itself: that having for its object the supplying of a substitute for the lost pancreatic secretion. This may be accomplished by the preparation of an artificial ferment, or by the extraction from the pancreas of its natural secretion.

The first method has been attempted by Prof. Lepine, who prepared an extract from malt. In four cases reported by him, in which this preparation was used, there was distinct improvement; the amount of sugar excreted daily was greatly diminished, but the effect was only temporary.

Pancreatic extract has been used experimentally by Prof. Torup, of the University of Christiana, in the case of dogs rendered diabetic by extirpation of the pancreas. As the result of the injection of pancreatic extract, sugar absolutely disappeared from the blood, and remained absent during the continuance of the injections. Unfortunately, however, the extract when administered by the mouth was inefficacious, it probably being destroyed in the stomach.

As applied to diabetes in man, a glycerine extract of the pancreas used by Ballistini in two hundred cases caused marked improvement in each instance; and other evidence of an equally encouraging character is accumulating. In these cases the injections were made directly into the veins, a procedure which, while controlling the diabetes, is decidedly dangerous. As yet apparently no other method has been attempted, but *à priori* it is reasonable to assume that the use of subcutaneous rather than intravenous injections of some modified preparation of this extract might aid in the solution of the problem. Pancreatic

grafting has been suggested, but the probability of the early atrophy of the transplanted gland renders such a radical procedure scarcely justifiable.

Though the solution of our problem is by no means in sight, yet the experiments and their results warrant a reasonable expectation that at an early date much will be done to rescue a class of hitherto hopeless sufferers from the realm of the incurable, and we may agree with Prof. Lepine that theoretically the treatment of diabetes mellitus has been discovered. Many details remain to be perfected, but it would seem that the time is near at hand when diabetes, like myxœdema, will have been conquered by our increasing knowledge of the subtle chemistry of the human body.

THE MIDDLE OF THE ROAD.

BY Z. T. MILLER, M.D., PITTSBURG, PA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania.)

MY Democratic friends, my Republican friends, will pardon me for injecting into this paper a bit of the Populistic creed. The title seems so *apropos*, and the subject upon which I write so well epitomized by the text, that no other title could possibly express, in so few words, the exact duty of every homœopathic doctor. *Homœopathy* is the "Middle of the Road;" its standard is *truth*, first, and plenty of gold and silver afterward, no matter what the ratio. It is to be congratulated that no machinery manipulates its formulæ; no chicanery distorts its platform, and selfishness can never add to or take from its prestige of one hundred or more years. Bolters from the convention sink into the oblivion of the outcast, and nothing save a charity 'kin to that bestowed upon the prodigal son can reinstate them to the fold and fatten them from an attenuation of a diet of husks. The "Middle of the Road," then, marks a line hither from the earliest enunciation of its principles, and leads back, as well, to an epoch in human affairs when the psychic forces, so-called, gave birth to principles and man, whose attributes are well nigh immortal. I need not mention the many,

to you, familiar examples that illustrate the truth that when a step forward in the progress of the all-governing, unavoidable momentum of evolution is to be taken, men rise who become the enunciators of the new and destroyers of the old. Nor need I tell you what that step was or who the man who took it. Much less need I tell you that the impress of his feet has not been found anywhere in the succeeding march of medical history but in the "Middle of the Road," neither turning to right here or left there as an idle whim of substitution presented itself. The law that was to mark an era in medical events burst upon the miserable pretensions that marred mankind, and a man, whose courage was as colossal as the might of a Sampson, pulled down the pillars of a mighty temple of deceit and built upon its ruins that which was and is adapted to the needs, mental and physical, of men, mothers and babes. Such discoveries and such men are not errors; they are evolved from the inner consciousness of an unmistakable and ever unfolding nature, and have the impress of the finger of God.

The persistence of a conviction that faltered not from its inception; that carried to completion, in logical sequence, the various records of its progressions; that battled for and maintained the declaration of its supremacy until its opponents acknowledge the right of the decree, while its friends proclaimed a loyal allegiance because of their love of the gentle and hatred of the barbarous, could have accomplished the stupendous work achieved in no other way than by keeping to the "Middle of the Road."

The faith that moves mountains is potent for great good or great evil; fortunately, the faith of our prophet was for great good; and that he held to the median line accounts for the mountains that have been moved and the multitudes that have been mastered.

He announced the fact and stood to it as of divine appointment, being unalterably convinced of the truth himself. He evinced character requisite for the moulding of new methods, and possessed the force that compelled acceptance. So well was the work done that not one of his followers need step aside. The foundation and superstructure descended to them an inheritance without a codicil, a habitation in appointment complete.

The one command of the sage of similia was: Keep to the "middle of the road." He himself saw no occasion to depart from the line, and, having drawn it, illuminated it, placed it conspicuously before the men most interested, had a right to expect that those who accepted the directions would follow them and stay in the "middle of the road."

It has been said of me that I am entertaining, but not instructive. I have heard of damnation by faint praise. That criticism seems to me to be about as near an approach to the results accredited faint praise as could be without calling the aid of the instigator of the remark. Be that as it may, as betwixt being interesting and uninteresting, or *neither* instructive or interesting, I prefer the former as having at least a semblance of usefulness. Perhaps I was assigned this bureau because the chairman agrees with me that it is possible to be interesting if not instructive. Indeed, I know of no department of medicine wherein it is possible to be so interesting and at the same time well nigh impossible to be instructive; where so much can be and is said; where so little absolutely trustworthy instruction is imparted. The very nature of the evidence, its source, its possible contamination, its toning to meet the requirements of the occasion, its lack of basic judgment, all combine to o'ereast it with a pall of uncertainty that shows at once that the "middle of the road" has been strayed from.

It requires a level head to be a deductive clinician. It's possible to be a good doctor, but a thunderin' poor reporter of clinical cases. It's possible to be a good prescriber, but one needs to be a Mahatwa, or some kind of a theosophical thing, to know just whether he is the only one meddling in the case.

Now, I would not cast a shadow of doubt upon the reports of any man. Yet my own critic hesitates not to say "they lie" when a marvellous cure of some poor sinner or saint that has been respited for their respective future abodes is mentioned. The man who reports well of cases by the cm. potency is a "liar" in the judgment of the man who never has, and by the devils never will, go higher than the 3x. The cm. man, with a contempt quite as emphatic, brands his brother of the 3x proclivities as some kind of an animal whose father and mother did not belong to the same species, and, to be brief in

sentence, hisses 'twixt his nither, nathur or neether incisors, *Mongrel*.

Of course, you will recognize at once the beautiful harmony and angelic simplicity that lurks in the "souls" with but a single thought. The Montagues and Capulets of medicine, with their Tybalts and Mercutios, need something more than the sickly Romeos and sicklier Juliets to keep them in the "Middle of the Road." The houses will not be joined and preserved from disintegration by internal strife if they do not "come off the perch" and not go round with sword dangling between their legs ready to disembowel the villain who dares to say Cm. or 3x.

I am afraid some of us will exclaim, Where is the "middle of the road?" I answer, so far as homœopathy is concerned, it is *Similia Similibus Curanter*. You need not stop to argue whether you spell the third word with an *a* or an *e*, but go right ahead, applying the symptoms of the provings, as represented in the drug, to the symptoms of the sick as represented by disease. That's the "middle of the road;" "und Heir Steh ich, ich kann nicht anders."

There is a field for clinical observation that has been but poorly worked, one from which much valuable information can be obtained if the crop is more than indifferently attended. For instance. A well-put-up job of recovery while the cm. potency was being administered, is brought to your notice. Your 3x man, who believes such reports are false as to the *cause* of recovery will hardly question the *fact* of recovery, since the fact is capable of demonstration. Admitting as much, you may learn that it is possible for a very sick man to recover while taking the cm. potency or *no* medicine, as you will. This knowledge will stand you in assuring confidence when you meet a similar case, even though you treat it after your own method. If your patient gets well also, you *may* argue that the medicine cured him, for you *know* medicine was given. You may argue so in spite of the fact that you have just learned that such a case can recover *without* medicine, and I know of nobody who can say you nay. What if the patient dies for both my cm. and 3x friend? It were a work of supererogation to recount the argument of my cm. brother, who views with the greatest possible concern the growing tendency on the part of

some people to kill others. While my architectural knowledge fails entirely in an attempt to describe the curve that curls the upper lip of my other, the 3x friend, as he contemplates the soullessness of allowing anybody to die without medicine. How plain is it to be seen that neither of these friends is in the "middle of the road."

This business of medicine is a peculiar business. It admits of extremes and happy means, at least it seems so to me. In my own experience I have seen moonshines accomplish that which the crudes seemed incapable of, and *vice versa*. I have also seen the middle ground yield an equally abundant harvest. As yet I have not been able to formulate a rule for the adoption of either scale. In running this gamut I feel that I am strictly in the "middle of the road," so long as like symptoms are pitted against each other. I am no less in the middle if I allow my patient the full benefit of his own recuperative resources. Of one thing I am unalterably convinced, and that is it's better to *stay out* when you have not a full hand. The practice of giving something for the sake of giving, or giving it because you don't know of anything better to give, is rot. You couldn't get further from the middle—unless you give two. I think I would as lief be a foot-ball in the hands of the craziest Pada-rewski, middle-parted mob as to have my vitality kicked around for the fun of it.

The clinical man is the one made up of distinct properties. He has perception quite characteristic. Sees things from an angle other than the man with a knife. He embodies two qualities, the observant and constructive. No one can be a successful clinician without them. To observe your subject, and from that observation construct a form that stands out bold to be measured for the curative clothes, constitutes his work.

It is hardly necessary for me to state what is required to qualify one for the task just mentioned. A knowledge of disease, also a knowledge of materia medica, you suggest at once, but there is something else—a formative mind. Imagination is not the thing, although at first sight it would seem to be.

A formative mind grasps suggestions. Suggestions are the symptoms of the patient as subjectively and objectively expressed, *and* the written language of the materia medica. The suggestions from the two sources are built and rebuilt until the

structures are as nearly alike as it is possible for them to be when there materialize the forms of similia. The mechanical mind does not seem to me to be equal to the occasion, but is quite and eminently adapted to the sanguinary part of the medical art.

The reason some men are unable to make head or tail of *materia medica* is, no doubt, due to the fact that the words they read are not supplemented by the constructive element of mentality. The beginning is forgotten before the ending. Hahnemann must have recognized this feature of his possible disciples and met it by a strict command to note the symptoms of the patient at the bedside.

The man who reads but does not listen to his words is as blind to the intent of his lesson as is the sightless man to the beauties of a sunset. If by the time he has finished the symptomatology of a drug, his mind has not been impressed by a picture of its effects so vivid and accurate that it can be thrown upon a screen for him to look at, then the time spent in the reading has been lost, lost because he has not taken his notes this time by the bookside. The same is true of observations on the patient.

This process of observation and notation need not obtain in every case. When in our mind's judgment we can safely trust a case to that kindly recuperative force *vis medicatrix naturæ*, the intricacies of the problem need not be applied. Only the severe and death-tending or the persistently chronic diseases raise to the dignity of such consideration.

Some men can talk, some men can think. When the men who talk and the men who think join their forces, good may come, provided they think the truth and speak the truth. The time is ever propitious for such utterance; but none more so than when the questions that come nearest the welfare of the people are being discussed. The responsibility of the educator must not be underestimated, nor must the sovereign self of each individual be measured at one fraction of an inch less or weighed at one atom of weight less than it stands for in this land of men among men. The educator must know that the men whom he seeks to educate are themselves educated, that they listen, not because they learn something, but because they hear familiar things, and familiar utterance are always

welcome utterances. Those thoughts occur to me as eminently applicable in summing up the attitude and relative importance of the medical and surgical branches of our profession. The man who wields the power of a definite knowledge of *materia medica* and the man who commands the absolute force of the knife are as indispensable, the one to the other, as are the + and — terms in electric subtlety. The scope of their respective labors is fast drawing a line of limitation beyond which neither cares to poach. How futile it would be for the one to essay the total sum of knowledge when those they address are themselves educated. When, however, they combine their knowledge and exercise their powers in the highest development of art, the marvels materialize and the blessings of the miserable and maimed made whole do follow them.

One thing this combination, so potent for good, must do is to stay in the "middle of the road," and, as I have said before, that "middle" is homœopathy. In the medical art every requirement is fulfilled, while no part of surgical technique but that can be most happily supplemented by it. Its resources are equal to the uttermost demands, thus rendering negative the necessity for such miserable makeshifts as brand us insincere in our profession. The world over the greatest achievements are wrought by the simplest means. In no way is homœopathy an exception. Her experience is pregnant with the children of her conception, and her literature an unending record of the labors that have brought forth the fruition of her mighty truths. The pride of every man who musters under her banner should forever forbid that his footsteps should leave their prints anywhere save that middle ground where trod the master, followed by a host of men upon whose day the sun of similia never sets. Hering, whose memory is yet green, whose labors lightened yours, whose perceptions broadened the vision of all who followed him; and Lippe, that brave, uncompromising defender of the faith, he whose combativeness faltered not, whose sword knew no scabbard so long as his convictions were assailed; and Guernsey, than whom none have more carefully, tersely, succinctly handed to his successors the secrets of his own achievements; and Farrington, the sound of whose name awakens in the mind of many of you an association when the rôle of least before the greatest was

your respective parts in the drama of *materia medica*, a man whom gentle earnestness and thorough devotion to *his* calling and *your* advancement made him a memory wreathed with immortal gratitude. What one of you that has not been taught by one or more of the men who bore the illustrious names just mentioned?

The modesty of the living forbids mention of the many no less famous, whose daily work and successes show them clothed with the mantles of inheritance. *Whence the source of all this?* What the inspiration that started it? What the rock smitten by the God-gifted hand of the *sage*, from whose cleft sprang a crystal, rippling water, more patent to heal than the liquid of Lourdes ever was or ever will be, notwithstanding its Virgin maternity? The answer is not in the stars, but in such monuments as this—THE HAHNEMANNIAN, of Philadelphia—supplemented by the many similar that dot this great homœopathic land of ours. The murmurings of another answer are being heard. Men whose lives have been brightened, whose usefulness has been heightened, are determined that the sun of their gratitude shall shine upon the form and feature of the man who stood for them. Even though the eyes be dead to sight, the ears dumb to sound, the lips speechless to acknowledge, yet will the marble and bronze proclaim to the whole world that the voice of a hundred years ago is echoing loud, long and distinct across the waters and against the hills and hearts of a country in whose freedom his wisdom met its most cordial acceptance.

Fitting place and fitting time this, fitting men and women here, who, hand in hand, neither looking to the right nor to the left, lift their faces to the light of truth and bless the name of Hahnemann, its source, by keeping in the “middle of the road.”

APIS AND ZINC.

BY EDWARD CRANCH, M.D., ERIE, PA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania.)

APIS and zinc have in many ways a certain relation to each other of acute and chronic, not inimical, as are the two more similar acute remedies, apis and rhus, but complementary, as are nux vomica and kali carbonicum.

Both apis and zinc give rise to symptoms of hydrocephalus, such as follow suppressed eruptions, with dulness, shrill screams and afternoon aggravation. Both have stinging pains, erythematous eruptions, conjunctivitis, stomatitis, nephritis, proctitis, suffocative cough, convulsions, and that rather peculiar symptom, fidgetty feet.

Mentally, both cause irritability, depression of spirits, anxiety, bewilderment and unconsciousness. More particularly the apis subject is much given to *whining*, and this whining voice was one of Dr. Lippe's especial key-notes for apis, and has many times been usefully verified. The apis patient, if a woman, is apt to be of a jealous temper, besides being clumsy, letting the dishes she is wiping, or the bric-a-brac she is dusting, fall to the floor. If very sick, she confidently predicts her death, which event the zinc patient views with entire equanimity, although very sensitive to noises and to the talk of others. Both sets of patients are of changeable, fickle temper and uncertain in their continuity of application.

Both apis and zinc will relieve headaches, acute and chronic. The chronic headaches of zinc have specially painful and tender spots, and are often seen in nervous prostration and in chlorosis, its acute headaches are mostly from worry or fatigue, and have the fidgetty feet as a marked accompaniment. The headaches of apis are violent, stormy, with fulness and burning, and with puffiness of the face, cold water relieves, heat is aggravating, especially near a stove. A comparison may be had with glonoine, with its still more violent throbbing; with belladonna, with its great thirst and desire to wrap up warmly, in spite of a partial relief from cold water, and with silicea, with its characteristic relief from hot applications, even from poultices. Apis and zinc both have falling of the hair.

Both apis and zinc have many eye-symptoms in common, as conjunctivitis, lachrymation, photophobia, and stinging pains, only apis has more œdema, always of a red color, often with the most serious inflammation, so that, as Hoyne reports it, "the whole eye looks alike." Both drugs have ulcers on the cornea, iritis and pannus. Zinc especially will cause and cure pterygium, sharing this distinction with rhatania. Zinc is useful in granular lids, and the presence of a green halo in the vision of the zinc patient may prove to be a valuable hint.

Apis alone is very useful in facial erysipelas, violent, but without thirst, while zinc is of especial value in the cachectic neuralgias that often follow such cases. Both drugs have stomatitis, with rows of aphthous ulcers anywhere in the mouth or fauces, but apis has the acute form of a fast-swelling glossitis, with or without profuse salivation, and apis is also of the utmost value in diphtheria, when the acute symptoms peculiar to apis are present, œdema, thirstlessness, numbness of hands and feet, scanty urine, stinging pains, aggravation from heat of stove, and at three or four in the afternoon.

Both remedies have soreness of the whole alimentary canal, including the anus, but the stool of apis is very easily expelled, in spite of the pain in the bowels, in fact, in children, the anus may be seen standing open all the time. Both drugs have colic, and both are useful in the cephalic symptoms that often supervene upon cholera infantum, and are known by the name of hydrocephaloid. Zinc extends its action to the state of torpor of the intestines that follows or alternates with protracted diarrhœa.

Hoyne recommends apis in trichinosis, its peculiar pains and swelling make it homœopathic to this dreaded condition.

Both drugs have enlargement of liver with commencing dropsy, but apis has the more acute pain and soreness. The desires and aversions of zinc are more marked in particularity than in apis, which has general loss of appetite and of thirst, while under zinc the patient refuses sweets, fish, veal, milk and many warm dishes; he is always made worse by wine, yet what he does eat or drink he takes hastily, as if greedily. The zinc patient is generally thirsty.

In the urinary tract the effects of apis are more violent and acutely inflammatory than those of zinc; the former having acute nephritis with dropsy and albuminuria, while the latter is more often useful in gravel, as its characteristic symptoms will show. The secretion of urine under apis goes to extremes, very profuse or very scanty, and always with frequent urging. With zinc the pains, as in other situations, are more neuralgic than inflammatory.

In the female sexual sphere the action of either drug will cause leucorrhœa, uterine pains, menstrual clots, pruritis and nymphomania. Apis, however, has a stronger affinity for the ovary, causing ovaritis, oöphoralgia and ovarian dropsy.

Both drugs cause cough, hæmoptysis, and suffocation : under apis the sufferer feels as if he could not draw another breath; the feeling is analogous to that other interesting symptom of apis, "cannot strain at stool without feeling as if something would burst;" the cough of zinc is as if one would suffocate from the continuous fine tickling in the lungs. In the back and extremities there is stiffness under both drugs, but more lassitude and weariness under zinc, more numbness and swelling under apis.

Both drugs cause convulsions, general under apis, more localized under zinc, which also displays peculiar tremors.

The skin symptoms of apis and zinc are surprisingly similar, being both under the control of the nervous system, forming urticaria, itching and pimples, all more acute and fiery under apis, more protracted and cachectic under zinc. Both cause heavy sleep, interrupted by dreams with starting or screaming. Both have much chilliness, with faintness and sweating, both have fever and delirium, both have marked aggravation at 3 p.m. Apis has the wider range of ailments, but zinc comes in in many of the same ailments, only more often when these have reached their chronic stage. Both are very positive remedies, and undoubted in their action when they do act, which is always, in almost any potency, when the symptoms agree.

A COMPARATIVE STUDY OF THE URINARY INDICATIONS OF CHIMAPHILA UMBILATA AND FABIANA IMBRICATA.

BY ROLAND T. WHITE, M.D., ALLEGHENY CITY, PA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania.)

IN calling your attention to these neglected remedies, I am persuaded that they are deserving of much more regard and study than they receive, and that they will, *sine dubio*, amply repay the prescriber, who will accurately discover their clinical uses by the alleviation of suffering among those tedious urinary and bladder affections which try the temper of both physician and patient.

The chimaphila or pipsissewa is a small, perennial, evergreen plant, of the order ericaceæ, growing in the United States and

Canada, while *fabiana* or *pichi* is of the *solanaceæ* order, and only found in South America.

Chimaphila, classically, is a diuretic tonic and astringent, and was formerly held in high esteem as a remedy for scrofula, rheumatism and nephritic affections; often compared with *apocyanum* and *uva ursi*.

Fabiana is also a diuretic and tonic; used in gravel, vesical catarrh and certain forms of gastric disturbances.

Chimaphila seems especially applicable to the vesical and urinary disorders of women. The symptoms are distinctive and pronounced, but having many in common with several of the polychrest remedies used in these affections, such as frequent urination and *tenesmus vesicæ*, with cutting, smarting and burning pain during micturition; pain in the back, described as a sore, heavy feeling in the lumbo-sacrum, with dull aching in the hypogastrium; periodical attacks of *tenesmus vesicæ*, accompanied with burning, and followed by aching through perineum; aggravation in damp weather, and after getting feet wet.

The amount of urine in the twenty-fours is usually normal in quantity, but may be increased in those severe cases which are accompanied with mental disturbances, headache and nervous erethism, causing thirst and febrile state.

Cases suffering from chronic cystitis, vesical catarrh and irritation of the urethra: the urine rather offensive, turbid, neutral or very slightly acid; pus cells, bladder, epithelium and increased phosphates; distressing *tenesmus* and a sore burning at the meatus are relieved by the lower potencies of *chimaphila*, as are also many vague symptoms following these disorders, viz.:

Stinging and burning pain in vagina and labia; rheumatic aching, with weakness and malaise in the extremities; pricking, with dry skin, burning of feet, hot flashes, etc.; also useful in vesical irritations which persist after confinement.

Fabiana seems especially relevant to the dysuria and a variety of urinary difficulties following post-gonorrhœal complications in the male, although its usefulness in women possessing the necessary indications has been fully demonstrated.

The general symptoms may be compared with *mer. cor.*,

canth. and cannabis sat.; very frequent, painful micturition, with tenesmus vesicæ; constant sore, burning ache at the neck of the bladder (prostatic urethra) after urinating, with aching in the hypogastrium through to the perinæum; urine turbid, with pus and epithelium; albumin, and occasionally casts (hyaline); anxiety, lassitude; sometimes with fever and general muscular soreness. These latter symptoms are clinical, and are probably due, in these cases, to sepsis from local sup-puration.

A few clinical illustrations may here be of advantage in emphasizing the considerable field of usefulness of the drugs:

CASE I.—Mrs. C.; age 36; mother of five children. Labors have always been difficult; last one, a year ago, emphasizing the rule; was a forceps delivery, uneventful, recovering; but, on beginning to go about, discovers dysuria, with pain and distress in the bladder, characterized by paroxysmal, frequent, painful micturition, with tenesmus vesicæ, pain extending through the hypogastric organs to the perinæum.

The distress became so severe as to seemingly, at times, affect her mind, producing a brooding melancholy. She was under the care of physicians a considerable portion of the year; also taking anything recommended by interested friends, with, occasionally, temporary relief. Examination revealed catarrhal state of urethra and bladder; the urethra was dilated; urine neutral, turbid, with considerable vesical epithelium and pus; increased phosphates, with oxalate of calcium crystals, etc. Chimaphila produced marked improvement in a few days, which continued to complete recovery on following with a few intercurrent remedies as indicated.

CASE II.—Mrs. H.; age 52. Strangury, following colds, and bowel trouble. Painful tenesmus, with hypogastric aching; attacks at intervals of two years.

CASE III.—Mrs. A.; age 32; no children. One miscarriage, since which time suffered, at intervals, from attacks of dysuria. Pain described as cutting and burning, and great straining, leaving a sore, aching sensation through perinæum, extending along vagina. Urine turbid, with pus and epithelium, etc. These two cases were relieved promptly and efficiently by chimaphila alone.

A few short extracts from notes upon fabiana will more fully express its clinical value:

CASE I.—Mr. X.; age 54. Suppuration of prostatic urethra, with the usual symptoms of tenesmus; aching and anxiety; aching through loins and back; urine, albuminous; pus, epithelium, with considerable oxalate of calcium.

CASE II.—Mr. B.; age 45. Pain in left side and back, with dull soreness through hypogastrium; painful dysuria; urine turbid, neutral, loaded with pus and epithelium. Both cases cleared up with *fabiana*.

CASE III.—Mr. C.; age 35. Post-gonorrhœal stricture at prostatic urethra. A first attack of specific urethritis caused severe prostatitis; the prostate very much swollen and painful; urine entirely retained for two weeks, having to be removed by catheter: cloudy, with pus and epithelium; anxiety, fever and sweat. After the acute state, *fabiana* cleared up the case, relieving the resulting tenesmus and suppuration permanently.

These remedies have much in common from a clinical standpoint, *i.e.*, both have a special affinity for the urinary organs, but differ as to nature and degree of the disturbance produced, so the technical application of each is distinctive.

Chimaphila, from observation and historic uses, is known to produce decided constitutional disturbance of an inflammatory character, affecting the skin and causing a smooth erythematous inflammation, followed by desquamation; urine very scanty, and may be suppressed.

Of the two, *fabiana* is the most decided diuretic in its primary action, and the actual tissue change of the urinary tract, especially the bladder, more pronounced, having frequently cured suppuration and relieved a concentric hypertrophy of that organ.

Chimaphila meets those chronic catarrhal congestions following cystitis, and seems to be characterized by periods of aggravation and amelioration.

Both are to be remembered in acute prostatitis, with fever, pain, dysuria and anxiety. A verified symptom of *chimaphila* is the feeling of a ball in perinæum when sitting.

These remedies in the primary potencies will not disappoint.

ARSENICUM ALBUM has as ear symptoms: otalgia; sticking pains, from within outward; aggravated evening and night. Hearing difficult for the human voice only.

REPLY TO DR. R. E. DUDGEON.

BY DR. C. WESSELHOEFT, BOSTON, MASS.

IF, after a practice of homœopathy of over forty years, one expresses his doubts as to the absence of unequivocal proof of the principles underlying his adopted method of prescribing drugs, he must not be surprised to find himself confronted with questions as to his heretical course. The truth is, that what we call experience is apt not to be realized by us till after many years.

If there is any explanation due to my good friend, R. E. Dudgeon, it is that the article to which he takes exception was written in too terse and dogmatic a form. If the ideas therein contained had been carried out in greater detail and with less of the form of a program, then, perhaps, my generous critic would not have considered me wholly mistaken when I say that homœopathy still requires some more formal proof of its validity than it has received at the hands of Hahnemann a century ago. Like Dr. Dudgeon, I have practiced homœopathy faithfully with the only means which are at his as well as at my disposal. If he has considered them as perfect and unalterable, and has never wished for a greater degree of perfection in order to predict and achieve more certain results, I can only say for myself that I cannot share that absolute confidence in our methods, and have not only desired but have endeavored to the utmost of my feeble powers to correct and to strengthen certain weak places. These are to be found in our pharmacology, our methods of proving, and I now would add, after mature reflection, that neither a pharmacology nor a method of proving, even if purged of certain flagrant errors, would be of any advantage, if it should be discovered that the "law of similars," also, has certain limitations.

With regard to the latter subject, it should not be considered heretical to subject it to the more crucial test of modern methods of experimental research. The circumstance that both Dr. Dudgeon and I, in common with all others, are convinced of or believe in the final vindication of Hahnemann's law, is of very little weight. Experimenters from Keppler to

Koch, had they rested simply on surmises drawn from intuition ever so profound, would never have had their convictions realized; and it is possible that even to-day we should be in doubt as to the relation of the earth to the sun; the law of gravitation, the methods of differentiating pathogenic microbes and their relation to infectious diseases. No physician can have followed with interest the methods of Pasteur, and later of Koch, without noticing that the best therapeutics of to-day, including those of homeopathy, are sadly lacking just such crucial tests, for the want of which it has stood still.

It is impossible for me to agree in general with those who maintain that we have arrived at the acme of perfection, that there is nothing more to be done, that all attempts at improvement are futile because Hahnemann had done enough. I cannot agree in particular with those who, like my friend Dudgeon, claim that Hahnemann did much more than to rest his system on the one China-test (1790), although he did (six years later, 1796), in his masterly letter to Hufeland, point out many drugs that were used in the cure of symptoms similar to those they were capable of producing. Neither can I agree that it has been clearly demonstrated that although Hahnemann continued to elaborate the china result in his mind for six years longer, he did not consider that test as conclusively establishing the "law of similars." My reading of his writings leads me to think that his subsequent provings were made chiefly to demonstrate the actual effect of drugs upon normal organisms, rather than to corroborate the "law of similars" evolved between the years 1790 and 1796.

That they were indirectly expected by Hahnemann to do this there can be no doubt, but there is a doubt in my mind which, I think, many share with me, that the great imperfections in the present methods of proving have not yet permitted the elevation of a rule of similars to a "law of cure," and that in order to do this much more sagacity and genius will have to be brought to bear upon it. What Hahnemann endeavored to do by years of *literary* research and profound thought, now at length deserves to be corroborated by modern methods of inductive *experimental research*.

Readers who have not taken a hand in these methods, or who have only examined their results without closely following

the methods in detail, will scarcely perceive the difference between Hahnemann's methods and more modern ones. They are too prone to be satisfied with the contemplation of Hahnemann's wonderful intuitions, like that of the prediction of the cholera bacillus. But the difference between an intuitive prediction and a proof like that furnished with regard to the origin of cholera is stupendous.

To my thinking, it makes little difference, after all, whether or not Hahnemann considered the china-test as sufficient to establish his principle, or whether he arrived at it only after "an exhaustive course of ratiocination," or whether his "Fragments" and later provings were to be regarded in the light of final experimental proofs. Neither does it alter the matter to acknowledge "Hahnemann's cautious and deliberate action in his grand reform." The facts stand out clearly and boldly that homœopathy has stood still upon the findings of Hahnemann, and that every well-meant attempt to go on where Hahnemann left off is met with more or less opposition, beneath which it is not difficult to discern the fear of an assailant of a creed. In the right place let all men respect each other's belief, but let physicians beware lest they lose all touch with realities. This word "belief" plays rather too prominent a part in our school, and all I desire is to replace it by Dr. Hughes' admirably chosen phrase, "The Knowledge of the Physician."

But after this homily an admission is in order in favor of my critics. They might truthfully assert that all my plans and propositions go for nothing, because the proposer has done no work himself to demonstrate his propositions in regard to confirmation of the "law of similars," and he is free to admit that instead of writing out plans of work, this should have been quietly conducted and not announced until some positive or negative conclusions had been reached. My excuse why this has not been done is stated in my paper. The desiderata are genius, youth, wealth, in the absence of which I have appealed to those who possess these qualities.

As for the methods proposed, no one is bound by them. Each explorer must choose his own path and his own method and means. If those who may attempt work in this direction should find my suggestions as to methods unavailable, they are at liberty to try others; but it is impossible as yet for me to

abandon the underlying principle that it should be our object to *determine experimentally whether it is possible to arrest or cure with drugs artificial disease produced by drugs*; neither can I, at present, give up the hope that at no distant time our hospitals may come to our aid with statistical evidence of greater force than we have as yet had. These principles, I think, rest on solid ground, while the methods and their details alone are proper subjects for discussion.

Lastly, I trust that Dr. Dudgeon and others who may honor me with critical reflection will look upon my course as one not intended to reject Hahnemann's work, but to regard my attempts as a continuation at the point where Hahnemann left off, and possibly to supplement some of his observations with proofs of modern data derived from sources which were not at his command.

CORRECTION.

IN the article on "Night Sweats," by E. M. Hale, M.D., p. 60, January, 1897, HAHNEMANNIAN, for pyrotoxin read picrotoxin.

CANCER OF THE ŒSOPHAGUS WITH PERFORATION OF THE AORTA.—Dr. Brosdowski relates the case of a peasant of 45 years who for six months had suffered from difficult swallowing, and whose sputa for some time had been mixed with bright-red blood. While lying on his back or on the left side he experienced difficult breathing, such as one would expect from a heart disease at the asystolic stage. During the twelve hours that he was in the hospital he expectorated from 800 to 1000 gms. of blood, mixed with a little saliva. Death took place very quietly, preceded by spitting of blood. From absence of the pathognomic signs of aneurism a cancer of the œsophagus was diagnosed. The necropsy revealed the upper part of the œsophagus filled with friable coagula, and at the middle third of tube there was found an ulceration 10 cms. in length which occupied the whole circumference of the mucous membrane and was covered with a grayish detritus; the borders were hard and infiltrated with cancerous nodules. At its lower portion the ulcer had perforated the wall of the œsophagus and involved the descending portion of the arch of the aorta. On the inner surface of the latter, 8 cms. below the arch, there was a transverse lesion of the aortic wall $1\frac{1}{2}$ cms. in length, of oval form, with very thin and ragged borders; the stomach was full of liquid blood and dark-colored clots. Microscopically, the tumor was found to be a squamous-celled carcinoma, but the aortic lesion was not a cancerous metastasis, being merely a perforation due to inflammatory action.—*Annales Del Circulo Medico Argentino*, Tomo, xix., No. 18.

CORRESPONDENCE.

To the Editor of THE HAHNEMANNIAN MONTHLY:

The excellent article on the "Pulse," by Dr. Bartlett, in the January HAHNEMANNIAN, attracted my attention, and leads me to call your attention to the use of the little finger in counting the pulse as being worth a little detailed study.

Several years ago, while endeavoring to count a very rapid pulse in the case of a sick child, the counting of a fast pulse became the subject of conversation between the child's father and myself. He called my attention to the fact that in the exercise of his profession of engineer he could count the revolutions of a car wheel up to 250 in a minute, but that this was possible only by using the fourth or little finger.

Acting upon this hint, I have since tested to some extent the use of this finger upon certain pulses. It is a well-known fact that in many persons the pulse cannot be counted accurately, owing to its frequency, weakness or irregularity, or by its being concealed by the overlying tissues, and that it can only be approximated by its rhythm caught now and then. In these cases, by using the little finger, it is surprising how often an otherwise almost uncountable pulse or even unfelt one can be felt or counted.

It might seem, if this be the case, that the fourth finger should always be used for this purpose, but aside from the fact that it is less convenient by reason of position and habit than the first and second fingers, which, I assume, are commonly used, there seems to be a repugnance to the use of the fourth finger alone or with the others on a plain pulse. This may be due to habit or to variation in speed of transmission or both. I have also noticed that a pulse not readily recognized or counted after being understood with the fourth finger is immediately as readily understood with the first and second fingers. At least one physician to whom I mentioned it has verified the observation.

Very truly yours,

ALFRED WANSTALL, M.D.

Baltimore, Md.

EDITORIAL.

WM. H. BIGLER, A.M., M.D.

WM. W. VAN BAUN, M.D.

BAD TEMPER.

THE disadvantages, both personal and social, of a bad temper—in others—are so self-evident that we need not enumerate them here. We all recognize them—in others—and would do much to cure the disposition which causes them.

We all know the stress laid upon mental symptoms by Hahnemann in the treatment of disease, and we know, too, how often the ill-advised attempts to follow his teachings have been ridiculed, not only by the opponents of homœopathy, but even by its adherents. In so many instances it seems so puerile, so unscientific—and we are nothing if not scientific. But now it will be different. Dr. Lauder Brunton has begun to pay attention to mental peculiarities, and more particularly to bad temper, as an indication of diseased conditions. We may expect to see his example followed on all sides. Not only will the members of his own school seek to earn the gratitude of myriads by curing bad tempers, but many a homœopath will now believe that it is rational and scientific to have regard to bad temper as a symptom of disease not beneath notice nor hopelessly beyond relief.

Dr. Brunton, as we learn, some time ago noted that unwonted irritability of temper was often the precursor of headache, and described the beneficial effects of the bromide of potash and salicylate of soda in relieving the headache and presumably the bad temper. He now recommends the same combination for irritability of temper occurring in connection with various diseases, and more especially gout and cardiac disease. He remarks on the frequency with which it is associated with the latter, and quotes the case of a child in whom it was the only symptom of mitral regurgitation, the physical evidence of the disease being observed almost by accident. We can also refer to the irritability and excitability of temper, which is one of the early symptoms of general paresis.

In looking through the mental symptoms in our various re-

pertories—for example, Knerr's *To the Guiding Symptoms*—we will be able to gain many a hint as to the significance of the mental erethism, which is so often the precursor of disease, and which, from a failure to recognize its import, is neglected and unrelieved. Of course that bad temper is not meant which naturally attends any and every departure from health, in a greater or less degree, and which it is usually regarded as the prerogative of the man to exhibit in perfection, but a radical change in the disposition, whereby the usually quiet and self-contained individual exhibits reactions quite out of proportion to the stimuli which produce them.

Our materia medica includes a mass of such indications, some of which we are compelled to admit may never prove of any value, but many of which await only a rational and scientific interpretation to become of the utmost assistance both in diagnosis and treatment.

It is strange how loth we are at times to build logically upon acknowledged premises. If we are willing to accept as true that a diseased condition of body can so modify the action of the mind as to alter its mode of manifestation in the disposition, and that by changing the former the latter can be affected, why shall we hesitate to believe that all apparently natural characteristics of disposition may have a physical basis and be also amenable to treatment? And if so, why should we regard as exaggerated and visionary the claims that the natural disposition may be changed by remedies, homœopathic or other?

DIABETES.

MANY of the results of the investigation into the origin of disease are for the present of only scientific interest, and do not in any way modify the accepted treatment, by drug or otherwise. It is not so, however, with the demonstration by Klemperer of the possibility of a diabetes of renal origin, *i.e.*, dependent upon renal disease. The existence of pancreatic, hepatic and nervous varieties of diabetes is acknowledged; but the existence of a renal form is not so universally accepted. The fact that in diabetic patients the glycosuria disappears

should they become the subjects of granular atrophy of the kidney might have led to the supposition that the healthy kidney possessed, among others, the function of eliminating sugar.

When large doses of phloridzin are given to animals or to man, glycosuria results, without any previous accumulation of sugar in the blood, as is the case in ordinary diabetes, showing that the kidneys, under the influence of this drug, eliminate the sugar which is normally in the blood. Zuntz has further shown that if phloradzin be injected into one of the renal arteries, the elimination of sugar takes place for a time only through the corresponding kidney.

Klemperer has demonstrated furthermore that diet has no influence upon the glycosuria caused by phloridzin.

From these facts it seems a legitimate conclusion that this artificially-produced diabetes has its origin in the kidneys.

Other substances besides phloridzin, such as caffeine, digitalis, calomel, etc., possess the power of producing glycosuria, but only if a diet rich in carbohydrates be given at the same time and if there be an abundant diuresis. The effect of these drugs would seem to be due to the accumulation of sugar in the blood and its rapid elimination through the kidneys.

Interesting in this connection are the investigations of Poll (*Fortschr. der Medicin*, July, 1896) on glycosuria in febrile conditions where sugar had been taken in the diet. Sixteen cases were observed, including pneumonia, typhoid, quinsy, rheumatism and scarlet fever, the temperature ranging from 99.6° to 105° F. Glucose in doses of 100 to 150 grains was administered. In fourteen out of the sixteen cases glucosuria ensued in a short time after administration, and continued for from two to thirteen hours. Poll considers this special proneness to diet-glycosuria in febrile diseases to be due to the failure of the liver to store up glycogen, and its consequent elimination through the kidneys as sugar from the blood.

The importance of the recognition of a renal diabetes would lie in the fact that in such cases a special diet is not called for, and that therapeutic measures should be directed particularly to the kidney disease.

It will also give us, as homœopaths, another weapon in the combating of this disease, which ought surely at times to prove effectual when others have failed.

THE LONDON HOMŒOPATHIC HOSPITAL.

THE medical staff of the London Homœopathic Hospital, located in Great Ormond Street, Bloomsbury, W. C., London, has arranged a daily series of clinical lecture demonstrations during May, June and July, 1897, the object of the courses being the clinical demonstration of diseases, with their homœopathic and accessory treatment. Each course will embrace a separate specialty, and in the lecture demonstrations every endeavor will be made to bring the detail up to date. Two distinct lecture demonstrations will be given daily except on Tuesday and on alternate Fridays, when surgical operations and consultations, respectively, will take the place of and be regarded as equivalent to a lecture demonstration.

Qualified ladies and gentlemen who intend to enter for one or more courses, or the whole series, are requested to send in their names to the secretaries by the end of March. Priority and every facility in the examination and demonstration of cases will be given to those so entering. The programme will be found in the advertisement columns.

This is surely a move in the right direction, and the lectures should be heartily sustained by the profession. Whether the lectures are well attended or not, we trust to have an admirable exhibition of British pertinacity, the good work being continued and enlarged until a full teaching corps is established and the right is obtained to teach and qualify medical students. When this day arrives the position of homœopathy in Great Britain will be assured.

THE BEST WAY TO TAKE COLD.

WHILE all the world is sneezing and coughing with more or less grace and vigor, it is not surprising to find a large portion of the medical world agitated over the question as to the best way of taking cold, whether there is more chance of doing so by going from a warm to a cold atmosphere or the reverse. In attempting to decide the question we are reminded of the report of the discussion of a debating society which we once saw in a country newspaper. It was as follows: "The question for discussion was: 'Who leads the happier life, the farmer or the inhabitant of the city?' The question was decided in the affirmative."

We decide our question also in the affirmative.

GLEANINGS.

MIRROR-SPEECH, A NEW FORM OF APHASIA.—In *Progres Medical* Marcel Baudouin notes a new kind of aphasia, which he names "mirror-speech," in analogy to "mirror-writing (back-handed writing reversed to regular by reflection in a mirror). Dr. Dozen was the first to observe this symptom just published by his pupil, Dr. Marcotte, in his thesis on "Temporary Hemispherectomy." (*Inst. de Bibl.*, 1896.)

The case was that of a little girl of twelve years, apparently afflicted with a cerebral abscess following otitis, who was trepanned as a last resort. She got better, and improved rapidly in health, but the aphasia remained. She began to pronounce phrases seemingly meaningless, *e.g.*, "Te-tan-ma," "Yen-do-sieur-mon, chant-me," "Le-quil-tran-ser-lais-me-vous-les-von." She was very angry when she saw she was not understood. They happily thought of writing down what she said, and then saw that it clearly meant something, for she was pronouncing correctly, only inverting the order of the syllables. Thus the above phrases inverted meant, "Matan-te," "Monsieur Doyen, Méchant," "Voulez-vous me laisser tranquillement." M. Baudouin gives this to the specialists to fathom.

Dr. Grasset writes to Baudouin recalling an analogous case of aphasia in a woman, seen ten years previously, having hysteria major, in whom the inversion was *literal* instead of *syllabic*. She pronounced "luap teur," which they at last saw was the name of her regular physician, "Paul Rouet," spelled backwards. This phenomenon manifested itself for a long time, after which she became insane and was removed to an asylum, after which Dr. Grasset lost sight of her. In this case "the words inverted in their letters still kept their place in the phrase, whilst in your case the words are themselves inverted in the phrase. My patient, besides, made this reversal with a quickness and an exactness that stupified us." The case should be associated with the other as another example of mirror-speech.—*Am. Medico-Surg. Bulletin*, Jan. 10, 1897.

A CURIOUS CASE OF AMNESIA.—A remarkable case of amnesia of eighteen years' duration, with the result of a necropsy, has occupied the attention of the Medico-Chirurgical Society. It was brought forward by Dr. Bastian, who has observed it at intervals since 1878. The voluntary speech was limited to a few words, but the man could repeat words he heard and understood what was said to him. He spent much time in reading and evidently understood what he read, but could not read a single word aloud or write one from dictation, but could copy it when placed before him. At the post-mortem there was found complete atrophy of the convolutions supplied by the middle cerebral artery, extending inward so as to lay open the lateral ventricle, thus the region was occupied by a pseudo-cyst. The supramarginal and angular gyri had also disappeared, as had the posterior two-thirds of the upper temporal convolution. Dr. Bastian suggested that the atrophy of the convolutions oc-

curred at an unknown period of the illness, and that functional compensation must have gradually taken place from development of the corresponding opposite centres. Sir William Broadbent did not quite agree with this, and called to his aid two extra centres, viz., an idea centre and a propositionizing centre. Of course it is easy to imagine any number of centres, but until some evidence of their existence is offered beyond a suggestion to explain a single case, the majority will be content to confess ignorance. The discussion of the case was adjourned, and at the last meeting Mr. Spencer Watson resumed it, and remarked that number symbols differed from word symbols, as they were learned by rote, were related to touch, but never associated with emotion. The president, Dr. Dickenson, related a case in which there was remarkable separation of aphasia and graphia, suggesting that the subject wrote with one side of the brain and spoke with the other. He was a left-handed man. The speaker alluded to the case of Dr. Johnson, who, it will be remembered, lost the use of speech, but wrote as usual—in fact wrote Latin verse and a Latin letter to Dr. Heberden, and thus satisfied himself that he retained his intelligence. Dr. Bastian replied, after which Dr. Guthrie described a case of violent jactitations of twenty-two years' duration, affecting chiefly the left arm and leg, but involving in a less degree the opposite limbs. At last trephining was done, and the right motor area of the cortex removed. Paralysis of the left hand and arm followed, but lasted only a week, during which seventeen epileptic fits occurred. Symptoms of partial bulbar paralysis also occurred for several days. Normal action of the arm gradually returned, but jactitations soon supervened, and three months after the operation the case was just as it had been before. It was admitted that in severe cases such as this the possible advantages of operation are overbalanced by the dangers.—London correspondence of the *N. Y. Medical Record*, Jan. 9, 1897.

THE CHARACTER OF THE PULSE.—Wells, discussing the rate and character of the pulse, quotes the results of Prentiss's investigation. According to the latter the causes which produce slow pulse may be classified as follows:

Diseases or injuries to the nerve-centres, producing either irritation of the pneumogastric or paralysis of the sympathetic (accelerator) nerves of the heart, disease or injury of the pneumogastric nerve, increasing its irritability; disease or injury of the sympathetic nerves of the heart, paralyzing them; disease of the cardiac ganglia, by which the influence of the pneumogastric nerve predominates; disease of the heart-muscle (degeneration), whereby it fails to respond to the normal stimulus; the action of poisons, as lead or tobacco, either on nerve-endings or centres; the poison generated in salt fish, also the poison generated in certain febrile conditions, algid pernicious fever.

In addition to the qualities of the pulse already indicated, we may have a strong bounding pulse, indicative of inflammation, or increase in the muscular walls of the heart; an excited pulse, as in mental disturbances; a weak pulse, due to loss of blood, to pressure upon an artery, to weakening of the muscular walls of the heart from any cause; a jerking pulse, sometimes due to nervous condition of the patient, or heart disease, especially valvular; an unyielding pulse, found in arteries which have undergone a degeneration by the deposition of bony formation, most frequently observed in the aged.

Different diseases will present peculiarities of the pulse. For instance, the pulse in exophthalmic goitre is variable, very rapid and highly irregular. In

aneurism, the pulse is delayed in the vessel involved as compared with the apex beat, and is perceptibly weaker than it should be; these characters of the pulse often assist in locating the aneurism. In aortic insufficiency will be observed the Corrigan pulse, a quick or jerking impulse as it strikes the finger, also a superficial throbbing of the superficial vessels.

In arterio-sclerosis the pulse is hard and incompressible. Bradycardia, slow, weak and small, not always equal in number with the heart-beat, as the latter may not throw the blood into the wrist. Fatty degeneration of the heart, weak and irregular. Cardiac hypertrophy, full, regular and tense; cardiac dilatation, weak and irregular. Mitral stenosis, often normal, often weak and irregular on exertion. Tricuspid insufficiency, jugular pulsation with pulse usually rapid and irregular, and pulse at right wrist weaker than at left.

The writer concludes, therefore, that feeling the pulse by one familiar with its indications is not an idle formality, and its examination should never be omitted.—*The Medical Examiner*, Dec., 1896.

F. MORTIMER LAWRENCE, M.D.

SYPHILITIC HEADACHES.—Prof. Fournier (Paris) divides syphilitic headaches into two great divisions; the former includes those varieties where not the brain but the bones or the nerves are affected, and of this variety there are two subdivisions:

1. Neuralgic headaches corresponding to the course of a nerve, with painful points of pressure at the place of exit of these nerves, especially of the trigeminus. Appearing most frequently in the secondary (sixth to eighth month), more rarely in the tertiary period, they are differentiated by the evening and nightly exacerbations and the results of specific treatment.

2. Headaches depending upon bone affections may appear at any stage, but chiefly during the tertiary period, and on account of the accompanying great osseous deformation they are scarcely to be misunderstood. Here he would make three sub-classes:

- (a) Secondary periostitis observed as small and circumscribed elevations in the frontal, temporal or parietal regions, and which present a feel of tension or even of fluctuation; at the same time there is spontaneous painfulness and a characteristic exquisite over-sensitiveness to pressure.

- (b) Secondary periostoses offer the same symptoms, but, on account of existing bony proliferation, they feel harder.

- (c) Secondary bone-pains in certain definite regions, where no abnormality of the bone is perceptible. Here, also, the sensitiveness is so great that, on pressure, the patient, usually a woman, will cry out.

Contrasted with these preceding, there are the true syphilitic headaches, where no anatomical substratum is known. They are diffuse, and felt "deep in the brain." Of this class there are three sub-varieties:

1. Secondary headache, developing three to six months after infection; preferably after traumatism. In intensity it may vary from moderate to such a horrible hammering pain that the patient is unable to do anything. Simultaneously there are frequently vertigo, visual disturbances, anorexia and uncommon mental irritability. Though they may be persistent, yet generally they are intermittent, recurring in the evening or night. Specific treatment (mercury and, secondly, iodine) often yield astonishingly rapid results.

2. Those headaches preceding syphilitic brain diseases, the most important variety, as when they appear one may have opportunity to treat the disease before irreparable destructive lesions in the brain have been brought about. The pain is generally very intense, with, possibly, transient nocturnal delirium and exacerbations; its duration may be very long. Recurrences are very frequent, even under proper treatment, and such patients require long and careful surveillance. If mixed treatment be not carried out energetically and at the right time, cerebral syphilis may appear in three to six weeks, though it has been delayed three to six months, or appeared as early as fourteen days.

3. Para-syphilitic headaches, *i.e.*, headaches in those with syphilis, but which are not due directly to the disease, and, first of all, neurasthenic headaches. They are of slight intensity, long in duration, with no nightly exacerbations; finally, they do not yield to anti-syphilitic treatment.—*Medizinische Neuigkeiten*, No. 25, 1896. [“Suspect every long-lasting case of headache,” says Ricord; “it smells of syphilis.” Dr. Donner (Stuttgart), in his *Späetformen der Angeborenen Syphilis*, 1896, p. 111, calls attention to the value of headache as a forerunning symptom of grave cerebral syphilitic lesions in hereditary lues. Dr. Donner is a homœopath, and has written a work on hereditary syphilis, which should be read by every one who knows German.—F. H. P.]

FRANK. H. PRITCHARD, M.D.

TREATMENT OF CRURAL HERNIA BY AN INGUINAL OPERATION.—This operation is performed in six stages, viz.: 1. Opening of the inguinal canal; 2. Exposure of the superior orifice of the crural canal and isolation of the neck of the crural sac; 3. Extension of the crural hernia into the inguinal wound; 4. Opening of the crural sac and removal of the same, together with any omentum it may contain; 5. Closure of the crural ring by sticking Poupart's ligament to the pectineal fascia; 6. Closure of the inguinal wounds by sutures.—*R. d'Chirurgie*.

THE TREATMENT OF BURNS, GRANULATING WOUNDS AND SKIN-GRAFTS BY THE ANTISEPTIC CAGE.—Benson (London) has been impressed by the painfulness of dressing and the difficulty of rendering aseptic burns and large granulating surface wounds generally. They necessarily must be frequently dressed, and each time the pain to be endured is very considerable. What lotion to use is also a difficult question to decide, especially when the raw surface is a large one. Among the disadvantages of the ordinary method of dressing a wound such as that under consideration, one especially notices the following, which are all more or less overcome by the method here described: 1. The lotion is absorbed, and causes local or general symptoms. 2. The dressings must, for safety, be put on wet, and, consequently, act as a poultice does in rendering the parts sodden and the granulations œdematous and unhealthy. 3. The discharges are retained, and form an excellent medium for the growth and increase of organisms. 4. The vitality or resisting power of the part is lowered by the drugs used. This seems to be undoubtedly the case, as of wounds left open from the first it is surprising how few become septic, whereas of wounds carefully dressed at first and accidentally left exposed, it is remarkable how few escape. 5. The dressings adhere to the young superficial cells, which are torn off when they are removed.

To avoid these drawbacks, Benson has adopted the plan of treating all large surface wounds with an antiseptic cage dressing. The principle is to have a current of dry, pure air constantly passing over the wound, and also to have any discharges drained or washed off almost as soon as they are formed. The way to secure these objects is simple. A cage of some description is placed over the wound, and the dressings are applied outside this cage. The easiest way to make the cage for an extremity is as follows: A piece of tin is cut so that there is a splint for the limb to rest on, and a sufficient number of long, narrow processes projecting at the sides. These processes are bent up over the part to form a cage, which encloses the limb, the splint being attached by strapping above and below the wound.

Of course, if there is a large body wound, ordinary wire cradles will do, with antiseptic towels. For small body wounds, the best way is to get two pieces of glass tubing, and fix them with strapping to the skin, and stretch gauze over them. Benson has used this plan with success for skin-grafting of breasts. If this method is adopted, the wound can be easily dressed by merely lifting the gauze off the cradle and douching with a weak lotion. The granulations, previously œdematous, become small, red and firm, the discharge ceases entirely, the wound becomes dry, and healing is uninterrupted.—*The Lancet*.

H. L. NORTHROP, M.D.

THE STERILIZATION OF CATGUT (*Gueynatz*).—He recommends placing the catgut in half of 1 per cent. solution nitrate of silver for twenty-four hours after removing the fat. It is then dried or preserved in alcohol. The certainty of sterilization is tested by animal experiments. He also finds dry heat up to 150° C. for two hours effective for destroying the germs in the catgut. A higher temperature makes it brittle.—*Abeille Med.*, 1896, No. 25.

NOVEL TREATMENT OF VAGINAL BLENORRHEA (*Péry*).—It consists in using nascent carbonic acid gas. Remarkable results are said to be obtained by it.—*Ibid.*, No. 23.

THE ARTIFICIAL SHORTENING OF THE BROAD LIGAMENTS THROUGH THE VAGINA FOR THE TREATMENT OF PROLAPSE AND RETRO-DEVIATIONS OF THE UTERUS (*Kocks*).—The bladder is separated from the uterus as in total extirpation. The peritoneal opening is then stretched open right and left over the broad ligaments. The bladder is pushed high up and then sutures are introduced through the broad ligaments from without inwards and both ligaments are folded together, tied in front of the uterus in the median line. The upper margin of the bladder, which has been pushed upwards, is united by fifteen or twenty sutures, with the upper margin of the uterus where it has been separated. It is claimed that this shortening of the broad ligaments does not interfere with the course of pregnancy or labor while the uterus is kept in a mobile position.—*Centralblatt für Gynäkologie*, No. 32, 1896.

VAGINAL FIXATION OF THE UTERUS.—Zweifel states that after the bad reports that have come from Gusserow's clinic and the recent paper of Graefe, this operation should not be performed during the child-bearing period. The fundus uteri must be movable during pregnancy and free to rise in the abdominal cavity, and any operation which fixes it to the vagina, bladder or

abdominal wall is fraught with danger to the patient. Mackenrodt's operation may lead to the most difficult complications of labor. This is the reason why all operators have abandoned suddenly an operation which promised so much and was heartily welcomed, but is now in bad repute.—*Ibid.*

GEORGE R. SOUTHWICK, M.D.

RHINITIS AS A FACTOR IN PHLYCTÆNULAR OPHTHALMIA.—At a recent meeting of the College of Physicians of Philadelphia Dr. B. Alexander Randall read a paper on this subject, in which he said that among the many causative factors of phlyctænular conjunctivitis and keratitis, inflammatory affections of the nose must not be ignored, for they could frequently be demonstrated to be of prime importance. In the great majority of cases, hyperæmia and oversecretion of the nasal mucous membrane would be found more constant than eczema or any other of the more incidental accompaniments, and treatment limited to this alone would often bring about a cure quicker than could be effected by any local measures without it. Elaborate apparatus and skill were uncalled for. Mere illumination of the nares would usually show the condition, and simple sprays of alkaline and of oily solutions could do much to relieve it. Calomel insufflation could be more valuable than in the conjunctiva, and, instead of the iodine being a bar to its use, its combination with mopping the pharyngeal vault with iodine could be especially efficacious. Dr. Randall said that the ophthalmologist must not neglect this field, which used to be his; and, unless he has some one at hand better prepared than himself to give it due care, he should stand ready to study and treat in his patients these simpler nasal affections.

In the discussion which followed the reading of this paper, Dr. Ring stated that he had for nearly two years referred nearly all cases of phlyctænular conjunctivitis treated in his clinic at the Episcopal Hospital to the throat and nose department for nasal treatment.

Dr. Risley had been well satisfied with the results of rhinological treatment of obstinate cases,

Dr. de Schweinitz considered that in all these cases attention should be drawn to the condition of the nares. In his public clinics, when immediate nasal treatment had been impracticable, he had sterilized the nose, as well as the eye, by the simple remedies that he kept on hand for the purpose, and the results had been the happiest.—*New York Medical Journal*, Dec. 12, 1896.

OTITIC BRAIN ABSCESS.—Barr suggests for more careful discussion the following:

1. It is desirable that the pure otologist should himself operate on the skull and brain in inter-cranial complications of ear disease.
2. Should the interior of the cranium be opened even when the symptoms point to diffuse meningitis?
3. What is the best method of dealing with a thrombosed lateral sinus—ligating the jugular vein or incision and pressure?
4. What is the best method of perforating the bone while opening the cavities of the middle ear or the cranial septa of the middle ear?
5. The value of operative treatment on the cavities of the middle ear for the cure of intractable purulent cases as preventive of intra-cranial abscess.

CHAS. M. THOMAS, M.D.

MONTHLY RETROSPECT.

OF HOMŒOPATHIC MATERIA MEDICA AND
THERAPEUTICS.

REMEDIES IN SEA SICKNESS.—Lutze summarizes the indications as follows :

Arsenic.—Thirst for *cold water*, but vomits immediately after drinking. The smell and sight of food cause or increase the nausea. Desire for warmth, warm, open air on deck ; restlessness, etc.

Borax.—*Aggravation on downward motion* ; every time the vessel goes downward everything within me wants to come up.

Calcareo ost.—*Aggravation from upward motion* ; sour water flows from the mouth with nausea, or collects in the mouth ; great thirst for cold drinks, especially water ; no appetite ; milk or meat does not taste good ; nausea in the pit of the stomach from a sense of emptiness ; vertigo.

Cocculus.—The nausea is felt mostly in the head, and the stomach seems to heave up and down ; nausea from looking at the pitching of the vessel and a tendency to faint ; (nausea when riding in a car or carriage, especially when riding backward).

Colchicum.—Nausea and vomiting from the smell of the cooking ; feels much better from lying perfectly quiet.

Nux Vomica.—Death-like pallor of the face ; ineffectual urging to vomit or to stool ; thinks he would feel so much better if he could only vomit ; worse mornings.

Sepia.—Much nausea and vomiting, especially mornings before breakfast and forenoon ; aversion to the smell of cooking and even the sight of food ; (nausea from riding in a carriage) ; sensation as if the contents of the abdomen were turning over and over ; desire for sour, refreshing things ; nausea from rinsing out the mouth ; water collects in the mouth ; sour, bitter taste, better from breakfast ; food tastes natural ; costive.

Petroleum.—Great sensation of emptiness in the stomach ; nausea early in the morning, with collection of water in the mouth ; vertigo, with heat in face ; nausea and vertigo all day ; desire for beer.

Pulsatilla.—Chilly, dizzy and sleepy ; no thirst ; vertigo on rising from a seat ; all better by remaining up on deck in the open air.

Opium.—Great sleepiness and constipation ; absence of any desire or ineffectual desire for stool.—*Hom. Physician*, December, 1896.

ALANTHUS GLANDULOSA IN SCARLET FEVER.—Olds, of Philadelphia, says, concerning this remedy, that there is *putridity* throughout. The discharges are putrid, offensive ; there are putrid ulcers, offensive breath. The eruption comes out in patches, miliary, dark, purple. The skin between the patches of eruption is of a brownish or livid hue, or mahogany color. On the surface, in different parts, petechiæ are thrown out, large blebs form, containing a claret-colored serum, bloody serum ; also some blisters in different places. The imprint of the finger remains long on the skin. We find sordes

on the teeth. Ulcers come in the throat—putrid, smelling like bad meat—with offensive oozing from the mucous membranes. The tongue is black and oozes blood.

From the beginning of these cases there is delirium, with great anxiety and restlessness, thirst for cold water, dilated pupils. Later on there will be stupor, but still the restlessness may continue. Prostration comes early and suddenly. The mind seems to be in a dreamy state, as if the patient was walking in a dream. She sees rats running about the floor, imagines that rats or snakes are running about the legs, or that a snake is about the throat. There may be a desire to cry all the time or total indifference. There is loss of memory, she cannot think what she could reply. The moment she tries to rise up she falls back again. There is always vertigo on rising. There is headache with great fulness, burning in the head, aggravated in one prover from 3 to 4 A.M. Add to these symptoms the eruption, the offensive discharges from the nose and throat—copious, thin, bloody, excoriating—the livid, swollen throat, the tonsils covered with fetid ulcers, the tongue purple, swollen, perhaps with edges cracked, the urine suppressed, and you have a case of scarlet fever such as *ailanthus* corresponds to—an exceedingly malignant case.

There are some symptoms of this remedy like *belladonna*, yet *belladonna* is an entirely different remedy—you might say they were opposites. Some prescribers give *belladonna* for every case of scarlet fever in which they find delirium, restlessness, flushing of the face, dilated pupils, fulness in the head. This looks like *belladonna*; but *ailanthus* has all this and something deeper. The state of *belladonna* is one of active congestion, while that of *ailanthus* is one of torpor, prostration, zymosis. *Belladonna* has a bright red rash; in *ailanthus* the rash is in dark patches and the skin livid.

Ailanthus may be indicated in scarlet fever where the rash has been suppressed and symptoms like those enumerated come out. The mental symptoms will be present. If there is a rash, it is in purple patches; if not, the skin is blue and cold.—*Hom. Physician*, December, 1896.

POISONING BY PICRIC ACID.—In the *British Medical Journal* the following case of poisoning is reported by Mr. West:

"A man, aged 35, came to me with the following history and symptoms: On the previous day, at 3 P.M., he took what he at the time thought to be some powdered sulfonal, but which proved to be picric acid. The amount he swallowed was about a tablespoonful. The next morning he complained of slight frontal headache, pain over the abdomen and across the loins. He was deeply jaundiced. His urine contained bile and blood. The stools were natural.

"Next day the jaundice had slightly diminished, though the abdominal and lumbar pain persisted. In addition there was lachrymation, injected conjunctivæ, profuse mucous discharge from the nares and sore and irritable fauces. The urine still contained blood and bile. Three days later he was practically well, though still slightly jaundiced. At no time were the stools paler than normal, but the urine for some days contained both bile and blood.

"From the symptoms in this case it would appear that picric acid may be classed with phosphorus, antimony, arsenic, etc., drugs which, taken in poisonous doses, produce so-called hematogenous jaundice, due to the action of the toxic agent on the red-blood cells, destroying them and liberating their

hæmoglobin. I may add that distinct jaundice has been noticed in patients taking medicinal doses of picrate of ammonia."—*Monthly Hom. Review*, December 1, 1896.

SYMPTOMS FROM MORPHINE SULPHATE.—Ross, of Rochester, reports the case of a woman, æt. 30, of dark complexion, who took one-eighth grain of *morphine sulphate* for dysmenorrhœa, and in whom the following symptoms were produced :

Great anxiety, thought she was going to die.

Vertigo, objects seemed to be turning in a circle.

Head felt as heavy as lead, could scarcely hold it up.

Pupils contracted.

Delusion of vision on closing eyes, sees a man standing at foot of bed ; the room seems full of white and colored babies.

Intense itching, tingling, numb feeling on end of nose ; rubs it constantly.

Nausea, with repeated attacks of vomiting.

Violent palpitation, with throbbing of carotid.

Heaviness and weight of lower extremities ; felt very weak.

Numb feeling all over.

Spells of feeling faint come on suddenly, with great anxiety ; thought she was going to die.

Intolerable itching of skin.

These symptoms lasted for twenty-four hours, and gradually subsided.—*Hom. Physician*, December, 1896.

AURUM IN RHINITIS.—Cash records the case of a small boy of 7 whose nose was obstructed by crusts around and inside the nostrils. The mucous membrane was sore and red, and a thin, irritating discharge was present, causing redness also of the upper lip. The boy had been ailing several weeks, and nothing seemed to do any good. The child's condition was low, and he had a chronic cold about him. *Aurum met.* 3x in 1 grain powder was given, and a boric ointment locally. Improvement began at once, and in about eight days the nose was practically cured.—*Monthly Hom. Review*, December 1, 1896.

XANTHOXYLLUM IN DYSMENORRHŒA.—Barrow records the case of a Miss R., aged 27, who had suffered for years from dysmenorrhœa. Her sufferings at the menstrual period were so great that life became almost unbearable. She had tried all kinds of treatment without obtaining the slightest benefits. She had been an in-patient at the Royal Infirmary, where she was told she had a "conical cervix," and under chloroform an operation was performed. This did not result in any relief to her sufferings, the catamenia being accompanied as usual with violent pains. Two years after the operation Miss R., worn to a skeleton with suffering and despairing of getting relief, came under the notice of the writer. He prescribed *xanthoxylum* 1x ter die a fortnight before the menstrual period. In due time the menses appeared, and, to the great joy of the patient, there was very little pain. The remedy was continued for some time, and when left off the patient was completely cured. It is now three years since the patient first came under homœopathic treatment, and during the whole of that time there has been no return of pain at the monthly period.—*Monthly Hom. Review*, December 1, 1896.

F. MORTIMER LAWRENCE, M.D.

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THE TREATMENT OF ABORTION IN RELATION TO THE DISEASES OF WOMEN.

BY GEORGE R. SOUTHWICK, M.D., BOSTON, MASS.

(Read before the Massachusetts Homœopathic Medical Society.)

THE mistakes and more often the neglect of the obstetrician support the gynæcologist at the expense of suffering womanhood. The profession has recognized long the importance of lacerations of the soft parts, but the serious consequences of badly-treated abortions are avoided much more easily than a laceration of the perineum, which, though it entails serious discomfort and ill-health, is treated by a minor operation. On the other hand, the mal-treatment of an abortion is liable to lead to suppurative diseases of the uterine appendages, which demand serious and dangerous operations to relieve the patient. Not a few cases of chronic inflammation of the uterus and pelvic peritonæum or of sterility have their origin in a badly-treated case of abortion, and nearly all such cases which cripple womanhood and entail a great amount of suffering can be avoided by the proper treatment of the real cause of the disease.

The defects of the treatment generally employed are from

delay in interference, allowing a patient to become anæmic from a slight but persistent hæmorrhage, or from permitting the patient to become septic from prolonged retention of the placenta, or from the imperfect removal of the secundines.

Special emphasis should be given to the fact that the principles of surgical asepsis need to be applied quite as thoroughly to the management of an abortion as to the removal of a tumor. Do not wait for a chill and rise of temperature as an indication for the removal of the contents of the uterus. It must be anticipated. It is reprehensible to allow the development of septic poisoning as indicated by the chill and rise of temperature before removing the débris from the uterus.

It is not always the general septicæmia with its chills and abdominal tenderness which kills the patient. There is also another form of septic infection, dangerous, insidious and often deadly, *i.e.*, septic endometritis. Its symptoms are less pronounced and often are overlooked, but the infection spreads to adjoining structures, and the history of a suffering existence from pelvic inflammation and suppuration has begun, which is not always terminated by the removal of all or a part of the pelvic organs.

The time-honored use of the vaginal tampon requires much more restriction. It is no use to place an aseptic tampon in a septic vagina, or *vice versa*, nor can any vaginal tampon remain long and not become a breeding place, an incubator, of septic germs. The vagina and the tampon must be both aseptic by thorough preparation at the time. The difficulty of obtaining these conditions demands restricted and very careful use of the tampon, in exceptional cases only, to check hæmorrhage temporarily till other effective means can be used.

Early removal of the uterine contents is important, preferably by the finger, which is a sentient agent, but if this cannot be employed, the curette and uterine dilator must be used. By early removal we mean within thirty-six hours after abortion is inevitable. A certain amount of conservatism is advisable at the commencement of an aseptic case. If the cervical canal is dilated sufficiently to admit the immediate removal of the uterine contents and the disinfection of the uterine cavity, the operation should be performed without delay, but if the canal is undilated and we have reason to believe that the case is aseptic

and can be kept so, we are justified in waiting a few hours for nature to effect delivery or some dilatation of the canal. An important exception to such a rule is a criminal abortion. These cases are apt to be infected by the abortionist who introduces a dirty instrument into the uterine cavity. Such a case may be infected from the beginning, and the sooner the uterine cavity is emptied and disinfected the more certain is the patient to escape harm.

Briefly stated, my treatment of abortion is to cleanse thoroughly the vagina and to empty the uterus as soon as the dilatation of the canal will admit the finger or the narrow blade of Martin's spoon curette. The uterine cavity is then washed out with hot water and with equal parts of di-oxide of hydrogen and water, or a 3 per cent. solution of carbolic acid: a light aseptic tampon is placed in the vagina and an aseptic pad on the vulva. No ergot is given. If it is a case of criminal abortion, or if any symptoms of sepsis are present, or if the patient is losing much blood or becoming anæmic, or if thirty-six hours have elapsed, I proceed to dilate the cervical canal and empty the uterus. If sepsis is present, or if there is a tendency to hæmorrhage from the uterine cavity, I swab the cavity with dioxide of hydrogen, or exceptionally a mixture of equal parts of 95 per cent. carbolic acid and tincture of iodine and pack with aseptic gauze. The vaginal tampon is employed only to check hæmorrhage for a few hours.

It is hardly necessary to call attention to the fact that women treat abortion too lightly and refuse to take the rest in bed as ordered by the physician, and sometimes, perhaps, because the medical attendant has not explained the reason or been positive enough in giving explicit directions. Many patients would be better if the obstetrician made it a rule to examine the pelvic organs carefully two weeks and again a month after an abortion in all cases. Many unsuspected troubles would be discovered in time for successful treatment. Ergot acts more especially on the lower third of the uterus, producing a firm contraction and making it much more difficult to empty the uterus. The writer is convinced that far more harm than good is done by using ergot when the uterus is not perfectly empty.

The writer would briefly summarize the treatment of abortion and the prevention of its many serious sequels by urging:

I.—The careful application of asepsis and antisepsis with the same attention to all details as in surgical work.

II.—Preserving the patient's strength and an early operation if necessary to avoid loss of blood.

III.—The cautious and only occasional use of the tampon.

IV.—The early use of the fingers or curette and disinfection of the uterine cavity, particularly in criminal abortion, but a certain amount of conservatism in aseptic cases of natural origin.

V.—The importance of prolonged rest to obtain perfect involution.

VI.—Repeated examination afterward to discover early any of the important sequelæ which may follow even when a case has been carefully treated.

VII.—The essential factor in the treatment of abortion to prevent gynæcological diseases is to preserve the patient's strength and to keep the uterine cavity aseptic.

THE PRESENT STATUS OF PUERPERAL INFECTION.

BY THEODORE J. GRAMM, M.D.,

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“Every puerpera represents a wounded one.”—*Cruveilhier*.

THAT there are still physicians in both schools who do not practice the antiseptic method in obstetrics, and are not convinced of the necessity for the precautions which that method includes, is a fact which sometimes becomes conspicuous. To the majority of us most of the facts which I shall present are familiar, and have served as unerring indices along the difficult road which the obstetrician is sometimes compelled to travel. To others these facts may not have appeared to exhibit the necessary credentials for acceptance, because some correlated circumstances had not yet been elucidated, and therefore these facts have been looked upon as fallacious guides in practice. There may be some physicians who possibly have not considered the available material in favor of the antiseptic method in a

logical sequence, nor in their relation to analogous facts in other fields of medicine. I have therefore thought that it might be profitable to review the facts upon which rest the present views concerning puerperal infection as held by the majority of obstetricians.

It is interesting to observe in the manners and customs of primitive peoples* that among them and among their types yet remaining are found many practices which appear to have a direct reference, not only to the parturient but also to the puerperal period, and which evince a dread of something more than is involved in the parturient act. That this dread of an unfavorable puerperal period was well founded, is evidenced by the fact that many women died of what we would now call puerperal infection. In later times we find not only that many women have died from puerperal fever, but that in fact there have been most frightful so-called epidemics† which have desolated entire communities and transformed the place of refuge, the lying-in hospitals, into a charnel house. While physicians for centuries have been appalled at the frightful ravages of those diseases, and have made more or less persistent efforts to determine the cause, yet it is really only within the memory of the generation just passing away that anything like a satisfactory advance has been made in a knowledge of puerperal diseases. I suppose we need not long be detained by the old views‡ of the ætiology of so-called puerperal fevers: the theory of retention of lochia and decomposition of placental remnants; of metastasis of milk; of recession of excretions, sweat, lochia and milk; the gastro-bilious theory; the phlogistic theory; the erysipelatous theory which regarded puerperal fever as an internal erysipelas; the discussions of the localists and essentialists. In 1847, however, a new theory was proposed by Semmelweis§ which has been more beneficial in its influence than any discovery in the ætiology of disease until that time. He believed that puerperal fevers, of which so many women died,

* Engelmann, *Labor Among Primitive Peoples*, St. Louis, 1884.

† Meigs, *On the Nature, Signs and Treatment of Child-Bed Fevers*, Philadelphia, 1854, letter vii.

‡ Charpentier, *Cyclop. Obst. and Gyn.*, New York, 1887, vol. iv., p. 228; Winckel, *Obstetrics*, Philadelphia, 1890, p. 842; Eisenmann, *Die Kindbettfieber*, Erlangen, 1834.

§ Winckel, *Münchener Med. Wochenschrift*, 1893, No. 46.

were induced by cadaveric, and later he included other unknown poisons which were carried to the puerpera in the course of her delivery by the attendant. Concerning this theory history has repeated itself. It remained for a later generation to appreciate the import of this discovery, which marks an era in medicine. The circumstances of that discovery will never lose their interest. Time will not now permit me to recite them in detail. For our present purpose it must suffice to say that, acting in conformity with the deductions from his observations, Semmelweis, at the Vienna Maternity, compelled those who attended or examined women in parturition to wash their hands in chlorine water or in a solution of chlorinated lime, and immediately the mortality fell from 11.4 per cent. to 1.27 per cent.

In America Professor Oliver Wendell Holmes directed his attention to this subject and published his well known paper* on "Puerperal Fever as a Private Pestilence" in April, 1843. Holmes says he was led to consider this subject in consequence of a discussion following a report "of a physician who made an examination of the body of a patient who had died of puerperal fever, and who himself died in less than a week, apparently in consequence of a wound received at the examination, having attended several women in confinement in the meantime, all of whom, as it was alleged, were attacked with puerperal fever." Despite the masterly manner of its presentation and the overpowering conviction which his facts should have engendered, the essay did not make many converts. On the contrary, his views were opposed by Professors Hodge† and Meigs,‡ of this city, and a controversy ensued. Both in Germany and in America discussions of this nature were maintained for many years. The greatest eloquence was expended in favor of the non-contagious theory, whereas, on the other hand, an incontrovertible array of facts were presented in opposition.

In addition to the observation of Semmelweis which led to formulation of his new doctrine, and in addition to the clearly

* *Medical Essays*, Philadelphia, 1895, p. 105.

† Hodge, *On the Non-Contagious Character of Puerperal Fever*, introductory lecture, Monday, October 11, 1852.

‡ *Loc. cit.*, Lecture VI. •

recorded facts named by Holmes in his essay, many more incidents indicating the character of so-called puerperal fevers could be named which were observed with all the keenness of a recently awakened interest. The literature of forty years ago contains many instances, many of them independent observations which endeavored to sustain no particular theory, of physicians suffering from septic infection from cases of puerperal fever, and of physicians or attendants carrying septic infection to women and lighting up puerperal fever, and of epidemics which attended certain physicians or certain midwives or raged in particular communities or institutions, where the hygienic conditions were more or less above suspicion.

A case which excited much interest for many years, and one which served to illustrate the views of many who debated this subject, regardless of how diverse those views might be, was that of Dr. David Rutter, of this city, and later of Chicago. The experiences of this physician with puerperal fever have been oft repeated. To Professors Hodge and Meigs these experiences verified one view, and to Professor Holmes and others they verified the contrary view. The facts in brief are that Dr. Rutter had seventy cases of puerperal fever in less than a year, while neighboring physicians had very few cases or none at all. "Worn out with fatigue and wounded in spirit," he left the city for ten days. On returning to the city "he caused his head to be close shaved; he entered a warm bath, and washed himself clean; he procured a new wig, new clothes, new hat, new gloves and new boots. He did not touch anything he had worn, and took the precaution even to leave his pencil at home and his watch. He went to attend a lady in labor, who had a favorable parturition, yet was next day assailed by a horrible child-bed fever, of which she died. Dr. Rutter repeated this attempt at personal disinfection at a subsequent period, which was two years later, and with the same ill-success."* This case, which has figured so largely in discussions on puerperal fever, has been fully explained. Harris† states, on the authority of a contemporary, that Dr. Rutter was affected with ozæna which greatly disfigured his nose in time, the primary infection

* Meigs, *loc. cit.*, p. 105.

† Harris's *Amer. Jour. Med., Sci.*, Apr, 1875, p. 474, and *Pearl's Obstetrics*.

in his case having occurred from a pustule upon his index finger.

Thus far have been presented some of the facts and incidents related to puerperal fever in its early awakened interest in quite recent times. In this connection a later matter deserves attention. On December 6, 1883, a memorable discussion, as it has been aptly called, took place before the New York Academy of Medicine, in the course of which a number of the ablest obstetricians and gynæcologists took part. The discussion followed a paper by Dr. T. Gaillard Thomas on "The Prevention and Treatment of Puerperal Fever," in which he summarized the advanced views at that time, and named ten rules for the prophylaxis and treatment. The influence of this discussion was far-reaching and attracted attention to the new theory and treatment more effectually than any previous paper. The paper was ably opposed by Dr. Fordyce Barker, who said: "All would agree that the paper was remarkable for its originality, in that some of its pathological doctrines and practice inculcated for the prevention and treatment of puerperal fever had never been taught in any work on obstetrics or by any writer of acknowledged repute."* Almost every shade of opinion was expressed. The discussion doubtless caused some surprise in Germany, for it was soon followed by a paper by Carl Lomer,† who was an assistant at Schröder's Clinic, wherein he presented "the facts which have thus far been offered as such regarding the relationship which exists between micro-organisms and puerperal fever." The paper throughout is rather in the nature of an inquiry in which facts and not arguments are presented. The most important conclusions reached from these inquiries are briefly that: 1. Of all micro-organisms found in puerperal fever the chain-like micrococcus is of the greatest importance. 2. When found in the exudations of any case of puerperal fever, they have also been found in the deeper organs. 3. They have been found in erysipelas, scarlet fever, diphtheria and puerperal fever, and in each possess the same form and show the same disposition towards fertilizing fluids and coloring matters. 4. Although different varieties

* *Amer. Jour. of Obstetrics*, 1884, p. 288.

† "Our Present Knowledge of the Relations Between Micro-Organisms and Puerperal Fever," *Amer. Jour. of Obstetrics*, July, 1884, p. 673.

may exist in these diseases, we have as yet no positive proof of the same. 7. Chain-like micrococci have also been found in infected wounds and in the blood of pyæmia. 8. The pathological and anatomical investigations in these diseases show that they possess similar micro-organisms. 9. Besides the chain-like micro-organisms, others may be present in puerperal fever (*i.e.*, mixed infection). 13. In some cases no micro-organisms have been found, but this does not prove that they do not exist.

In the light of these conclusions, many of which are drawn from most elaborate investigations, what can be said of the *cause* of so-called puerperal fever? We are compelled to turn from such views as entirely inadequate, as those of Fordyce Barker* that, "In private practice it is generally due to some occult, possibly atmospheric, epidemic influence; in hospital patients, nosocomial malaria, often associated with septic poisoning," and those of Meigs, that the cause is an accident or a visitation of Providence rather than contagion, and from the opinion of Hodge that the dignity of the profession is compromised when acknowledging that the physician can ever become "a minister of evil; that you can ever convey in any possible manner a horrible virus, so destructive in its effects and so mysterious in its operations as that attributed to puerperal fever."

Denman† was probably the first to contend that midwives and nurses conveyed the disease from one patient to another, and he cautioned against the impropriety of those who are engaged in the practice of midwifery attending patients in fevers and other dangerous diseases. Instances verifying the truth of this induced physicians to abstain from practice for a time if puerperal fever appeared among their patients.

Mayerhofer‡ was the first to discover micro-organisms in purulent fluids from the pleural and peritoneal cavities of puerperal patients, and in 1865 he determined that the lochia of infected women were in character putrid, and discovered motile vibrios which according to him were the cause of the putridity.

Rindfleisch§ followed by a description of vibrios in suppura-

* *Amer. Jour. of Obstetrics*, 1884, p. 292.

† *Midwifery*, Brattleborough, 1807, p. 429.

‡ Quoted by Lomer, *Monatsschr. f. Geb.*, vol. xxv., 1869, p. 129.

§ *Gewebslehre*, ii., Aufl., p. 204.

tive carditis. Many others have been engaged in the same line of observations—Recklinghausen, Waldeyer, Klebs, Orth, Heiberg, Landaŭ, Spillman, Dolères.

Pasteur in 1879 instituted most valuable researches, which are well known, as a result of which he established the presence and action of micro-organisms, and by his culture methods and inoculation of animals was able to demonstrate conclusively the rôle played by micro-organisms in the ætiology of infective diseases. He likewise for the first cultivated the streptococcus from the organs of women who had died of puerperal fever, and many others* thereafter verified his observations.

Then it was shown by Brieger† that the staphylococcus might cause fatal puerperal infection, though as a rule only the milder cases are induced by this coccus. These observations were likewise verified by many investigators.

Döderlein reports‡ three cases of puerperal infection which resulted from a purulent ophthalmia in one of the patients, and terminated fatally in one instance. In these cases the infecting micro-organisms were proved to be streptococcus pyogenes and staphylococcus pyogenes aureus.

In another work Döderlein§ concludes, after quoting Dolères, Lomer, Czerniowski, Widal and Bumm, that according to all existing investigations, a disproportionately greater significance may be attributed to the streptococcus pyogenes for the origination of puerperal fever than to the staphylococcus.

Gonococci have been found to have caused nine mild cases of puerperal disease by Kronig.|| He reports that while none of the cases terminated fatally, yet there was an elevation of temperature in some cases to 104.3° F. The lochial discharge in all the cases was increased, pus-like, not offensive, and frequently already on the fourth day was purely purulent. Seven of the nine cases were discharged on the fifteenth day, but still had a markedly purulent discharge, and there was pronounced subinvolution. In two of the cases there was pelveo-peritonitic and parametric exudates, and the conclusion is reached that the

* For literature, see Lomer, *loc. cit.*

† Williams, *Amer. Jr. Med. Sci.*, July, 1893, p. 57.

‡ *Centralblatt für Gynäkologie*, 1891, No. 51, p. 1038.

§ *Das Scheidensekret*, Leipzig, 1892, p. 55.

|| *Centralblatt für Gynäkologie*, 1893, No. 8, p. 157.

extension of the inflammation from the endometrium through the tubes to the peritoneal cavity leads to the well-known gonorrhœal diseases of the adnexa.

The colon bacillus has been demonstrated to play an extended rôle in the ætiology of disease. Eisenhart* describes a fatal case of late puerperal infection in which the bacterium coli commune was the infecting germ, and which the pathological lesions found post-mortem proved did not enter the tissues through an intestinal lesion, but by way of the uterus. He likewise quotes von Franque who found this bacterium in pure culture in one case, and also mentions Schwarz, who in a case of puerperal peritonitis found, besides a few streptococci, the bacterium coli commune in great numbers.

In addition to these micro-organisms which have been demonstrated in certain cases of puerperal infection, many more might be named. Indeed, Ernst† has expressed the view that in this relation many micro-organisms demand attention, namely, such as may infect wounds, regardless of whether they have been found in the puerpera or not, since the wound infection resulting in pyæmia and septicæmia is the same as may result in so-called puerperal fever. From the above bacteriological observations we see that just as Welch‡ has said, so likewise is verified the statement of Spiegelberg§ "that puerperal fevers are only wound infections, only pyæmia or septicæmia, that therefore everything which is applicable to the wounded is likewise so for puerpera—an analogy which Simpson first endeavored to establish."

Now what are some of the peculiarities of the puerperal wound, and of the puerperal condition in general which favor infection? The pregnant and puerperal woman is in a peculiarly susceptible condition for the development of septic processes. I need hardly review in detail the well-known anæmic and hydræmic condition of every gravida which is so readily augmented by every cause of malnutrition and defective hygiene, the elements of nervous shock and physical prostration

* *Archiv. für Gynäkologie*, Bd. xlvii., Heft 2.

† *Amer. Syst. Obs.*, Philadelphia, 1889, vol. ii., p. 401.

‡ "Conditions Underlying the Infection of Wounds," *Am. J. Med. Sci.*, November, 1891, p. 439.

§ "Ueber das Wesen des Puerperalfiebers," *Volkman's Klin. Vortrage*, No. 3.

which attend every delivery, in addition to the hæmorrhage, which is usually so great as to affect the appearance and condition of the woman. There are circumstances here which have been experimentally demonstrated to favor bacterial infection. Welch* says: "Gärtner has recently brought forward evidence derived from experiments on animals showing that general anæmia and hydræmia render easier the infection with small quantities of the staphylococcus aureus, and Ribbert has demonstrated that the presence of toxic products of the same micro-organism in the circulating blood favors the development of foci of suppuration, a fact which evidently bears upon the pathology of pyæmia, etc." The presence of wounds and their condition in every puerpera favor infection. Wounds exist far more frequently than any may suppose who do not habitually look for them after delivery. The placental site, formerly compared to an amputation stump, with its multiple venous lesions, its close proximity to the peritoneal cavity, its numerous lymph channels, the sometimes imperfectly contracted condition of the muscular substance of the uterus, furnish conditions which must be considered in regard to infection. The same holds good for wounds in the cervix, either such as are distinctly recognizable as lacerations or only such as later leave no trace whatever in tissues whose lymphatics lead directly to those of the pelvis; the injured pelvic tissue whose substance is subjected to great pressure and displacement and whose vascular supply is thereby greatly disturbed; the wounds in the vaginal walls in addition to those well known to occur at the perinæum. About the vaginal outlet the wounds are *contused* and *lacerated* wounds which notably do not heal kindly, and which here, in addition, are subjected to all the dangers which arise from their situation partly on a cutaneous surface in a locality which is notably difficult to keep aseptic. The lochial discharge bathing these wounds furnishes not only a good culture medium, but likewise a pathway along the wounded genital canal which micro-organisms may travel, so that not only is there a pronounced interference with the integrity of the living tissue which is a predisposing cause of suppuration in case suitable micro-organisms gain entrance, but a culture medium is furnished for their

* *Loc. cit.*, p. 451.

reception and development until they have time to reach the tissues.

Let us look now to what this leads, or, I should rather say, to what this *led*, for I am not unmindful that the majority of obstetricians everywhere have adopted these views many years ago. As a preliminary, the old nomenclature, the old pathology must be abandoned. The old name, puerperal fever, finds no place now in designating the protean manifestations of puerperal infection, and in the same manner must a new pathology be adopted. Charpentier* succinctly expresses the views held by many writers a few years ago, when he says: "To entirely reject this term (puerperal fever) is to enter the road which leads directly to the localization of puerperal affections." Now, this is just what has taken place, and the situation is most concisely stated by Welch† when he says: "The manifold varieties of puerperal fever, which is now known to be a typical wound infection, may be caused by apparently the same streptococcus, producing a mild endometritis, a pelvic abscess, localized or general peritonitis, pyæmia or the most virulent and rapidly fatal septicæmia." Logically, we should now consider some cases which illustrate the correctness of the views for which this paper contends. Such reports of necropsies can readily be found. A small series reported by Williams‡ happens to be at hand, wherein, following a lack of proper antiseptic precautions, infection took place. Several forms of infection are demonstrated, and by the methods of bacteriology the infecting micro-organisms were isolated and identified. Another series of cases of puerperal infection is reported by Braxton Hicks,§ wherein the probable source of infection is clearly suggested. On the other hand, a search through current literature and recent text-books will be rewarded by innumerable illustrations of the efficacy of the antiseptic method as applied to obstetrics. A single reference, doubtless readily available, as I have endeavored to make all my references, is all the present occasion will permit. Garrigues|| reports a

* *Loc. cit.*, p. 287.

† Welch, *loc. cit.*, 404.

‡ Williams, *Trans. Gyn. and Obs. Soc. of Baltimore; Am. Jour. Obs.*, vol. xxxiii., p. 271.

§ J. Braxton Hicks, *Trans. London Obstetrical Society; Am. Gyn. and Obst. Jour.*, vol. v., p. 320.

|| Garrigues, *Am. System of Obst.*, Philadelphia, 1889, vol. ii., p. 339.

mortality of 4.4 per cent. during the five years preceding the adoption of the antiseptic method at the New York Maternity Hospital, while during the five years succeeding its adoption the mortality from all causes was 1.06 per cent., and from sepsis alone 0.27 per cent. During the last month before the change the total mortality was 20 per cent., of which 15.69 per cent. was from septic infection, while immediately after, in the first three months, 102 deliveries were effected without a single death. As a further result of the adoption of the antiseptic method, the much-dreaded epidemics of former times have entirely disappeared from maternity hospitals. Indeed, the anomaly is presented that the pauper and the outcast to-day has a far safer delivery than was and sometimes is now furnished by the best homes. Epidemics in private are rare indeed to-day.

The considerations thus far presented would seem to confirm the proposition that every puerpera presents the condition of a wounded one, and there are no manifest reasons why therefore the further proposition should not be adopted that everything which is applicable to one is equally so to the other.

In what shall the treatment consist? Manifestly in preventive measures, and these failing, in the use of means to combat the septic condition. Clinical experience notably demonstrates it to be far easier to prevent sepsis than to remove that condition. For the prevention of sepsis the indications are positive, the requisite means are clearly defined, the course of action is not the subject of debate. The brilliant achievements of surgery have not been attained in consequence of any recently acquired skill which has been bestowed upon surgeons as a new attribute, for instance; but they result mainly, if not solely, because the antiseptic method *permitted* the exercise of that skill which surgeons already possessed. Of the curative means we cannot speak so positively. The views of physicians do not make even an approach to the same unanimity. I would like to enlarge upon that statement, but must forbear at present.

How do septic germs obtain access to the puerperal wounds? They are carried there by the hands of the accoucheur, by his instruments, by the hands of the nurse, by unsterilized vulvar pads, by unclean douche nozzles, by the family douche-bag,

and in fact by every other existing means whereby a wound in general may be infected. This simple enumeration indicates what matters require attention in applying the antiseptic method, and it is not my intention therefore to consider in detail the various means at our disposal in order to obtain asepsis.

Now what shall we say of physicians who have practiced medicine for a great number of years and claim they have never had a case of puerperal infection? I would not for an instant detract from the value of the experience and skill engendered by long years of practice, but such claims are based upon negative observations which you must admit are outweighed by a single positive observation. One single authentic case of puerperal infection following exposure by any of the multitudinous means whereby it may be induced by reason of failure to observe antiseptic precautions, far outweighs numerous instances where infection did not follow an apparent exposure where antiseptic precautions were not taken. Besides, the memory is a most untrustworthy witness in such considerations, and is overclouded and unreliable in the presence of a conviction that a given event may not happen. The fact that in every instance, or in many instances, death from septicæmia did not result where there were no precautions taken against it does not militate against the fact that under suitable conditions sepsis follows exposure.

In conclusion, I have but to remark that puerperal infection is a preventable condition, and the success in general surgery, the success in large maternities and the complete obliteration of epidemics which have been effected by the adoption of the antiseptic method clearly indicate the necessity for its adoption in general practice.

THE PATHOGENIC ACTION OF PHOSPHORUS UPON THE KIDNEYS.

BY F. H. PRITCHARD, M.D., WEAVER'S CORNERS, OHIO.

THIS drug occupies an important place in the treatment of chronic nephritis; but what form of the disease is it capable of causing pathogenically? Kobert (*Lehrbuch der Intoxikationen*, p. 421, Stuttgart, 1893), that master of toxicology, states that

in cases of poisoning, in the last few days of the patient's disease, which usually is a matter of five to eight days, his entire appearance is essentially altered. His whole body is decidedly icteric, and many portions of the skin, especially that of the back, are covered with petechiæ. The urine, in case anuria does not set in, presents large numbers of casts, especially of the granular variety, with fat globules, cell detritus, red blood-corpuscles, leucin, and tyrosin, all undoubted signs of fatty degeneration. This fatty degeneration is one of the most characteristic actions of this powerful drug upon the organism. As Lenzmann (*Ueber einige den Arzt interessierende Nierengifte und die durch dieselben hervorgebrachten Veraenderungen der Nieren*. Festschrift zur Feier des 50-jæhrigen Jubilæums des Ver. d. Aerzte des Reg.—Bez. Duesseldorf, p. 159) says, it is very probable that an inflammatory irritation precedes this fatty degeneration, for if death occur very rapidly, only hyperæmia and swelling of the kidneys are found. Ribbert (*Nephritis und Albuminurie*) has found in rabbits, after administration of small doses of phosphorus, as an incipient stage of fatty degeneration, a characteristic glomerulo-nephritis, with swelling and desquamation of the epithelium of the glomeruli.

At any rate, after good-sized doses, the kidneys present a picture which is stated by Lenzmann to be macroscopically that of acute scarlatinal nephritis. The cortex is increased in size, soft in consistency, and the color varies from whitish to yellow.

Microscopically the epithelia are discovered either to be partly lying in the lumen of the urinary caniculi, or partly adherent to their walls, and chiefly having undergone fatty degeneration.

The urine is usually scanty, contains albumin and bile-pigments; the quantity of urea is subnormal.

L. W. Faglund (*Om fosforfœrgiftningar i Finland*, Festschrift fran pathologisk-anatomiska institutet, Helsingfors, 1890), also found, in poisoning by phosphorus, the kidneys showing the uriniferous tubes with epithelium undergoing cloudy swelling or distinct fatty degeneration, and containing numerous small drops of oil.

In both men and animals the administration of very small doses of phosphorus for months gives rise to an actual cirrhosis

of the liver with icterus, as well as to a cirrhotic state of the kidneys, which is not to be distinguished from true contracted kidney.—(Wegener, Aufrecht, Koenig, etc., cited by Kobert, l. c.).

This is an indication that the remedy might be found homœopathic to biliary hypertrophic cirrhosis of the liver (Hanot's disease), which is sometimes followed by cirrhosis after a preliminary hypertrophic stage.

This pathological picture would lead one to regard phosphorus as indicated, homœopathically, in amyloid degeneration of the kidneys, post-scarlatinal nephritis, especially the less severe cases, without any severe symptoms, as well as in the acute cases, if it be indicated, though chronic parenchymatous nephritis would appear to correspond more especially to its pathological results, and above all, in the form of the disease which is known as the large white kidney of Wilk's, in which the organ is enlarged, the surface white, with the stellate veins injected and the capsule thin. Osler (*The Principles and Practice of Medicine*, p. 747) thus describes the organ pathologico-anatomically: "On section the cortex is swollen and yellowish-white in color, and often presents opaque areas. The pyramids may be deeply congested. On microscopical examination it is seen that the epithelium is granular and fatty, and the tubules of the cortex are distended, and contain tube-casts. Hyaline changes are also present in the epithelial cells. The glomeruli are large, the capsules thickened, the capillaries show hyaline changes, and the epithelium of the tuft and of the capsule is extensively altered. The interstitial tissue is everywhere increased, though not to an extreme degree."

He describes a second variety, the small white kidney, which may either result from increase in the connective tissue and the subsequent shrinkage, or occur as a primary independent form. The capsule is thickened and the surface is rough and granular. On section the resistance is greatly increased, the cortex is reduced, and presents numerous opaque, white, or whitish-yellow foci, consisting of accumulations of fatty epithelium in the convoluted tubules. This combination of contracted kidney with areas of marked fatty degeneration has given the name of small, granular, fatty kidney to this form. The interstitial changes are marked, many of the glomeruli are destroyed, the

degeneration of the epithelium in the convoluted tubules is wide-spread, and the arteries are greatly thickened.

A third variety as described by him, and where phosphorus would be indicated, is chronic hæmorrhagic nephritis, in which the organs are greatly enlarged, yellowish-white in color, and in the cortex are many brownish-red areas, due to hæmorrhage in and about the tubes.

Bonino (*Primi Studi di Materia Medica*, p. 276, Turin, 1893) claims phosphorus to be indicated in amyloid kidney as well as in chronic nephritis with fatty degeneration of the kidneys, together with a similar state of the heart and liver. Dr. J. H. Freer (*North Amer. Jour. Homœopathy*, Oct., 1890), reports the case of an elderly lady, whom he had previously treated for acute nephritis with uræmic convulsions, and who consulted him on account of irregular heart's action. Especially after fatigue would her heart become embarrassed in its action, and she would have a sensation of suffocation, attended with and followed by irregular and tumultuous action of the heart. A microscopical examination of the urine revealed nothing abnormal except an abundance of oil globules. Phosphorus was prescribed on the strength of their presence alone, and it relieved the cardiac symptoms.

Dr. Oscar Hansen, of Copenhagen, in a paper read before the International Homœopathic Congress at Atlantic City (*North Amer. Jour. Homœopathy*, September, 1891), on the homœopathic treatment of Bright's disease, regarded phosphorus as one of the most important remedies. It is indicated when the disease is secondary to suppuration, and especially caries (amyloid kidney). When pneumonia complicates it is our best remedy. The characteristic symptoms are: lassitude in the whole body, hands and feet icy, sleepiness. The fatigue is greatest in the morning. Heat in the body without thirst, particularly in the evening; indisposed to work, giddiness, forgetfulness, heavy headache, particularly in the forehead; œdema of the upper eyelids, mist before the eyes, complexion pale, yellowish-gray; sickly œdema of the face; want of appetite; pressure and burning of the stomach; diarrhœa without pain, but weakening and light in color. Frequent passing of water at night, but of a small quantity at a time. The urine is watery and light-colored. Serous expectoration from the lungs is an important sign for

phosphorus; fear and anxiety; asthma. (Edema about the ankles. If there is a tuberculous base to the affection, phosphorus is important; likewise when there is weakening of the heart-muscle. If during the disease diarrhœa occur without pain, phosphorus is to be commended with china.

Hæmaturia has frequently been reported cured by this remedy. Burt (*Physiological Materia Medica*, p. 710, Chicago, 1883) states that it has made many brilliant cures of hæmaturia, with much pain in the renal region, especially after sexual excesses. The pathological state, both of the blood and of the bloodvessels themselves, produced by this drug favors hæmorrhages, from all parts, into the mucous membranes, from the orifices, into the organs and even beneath the skin, in the form of petechiæ. The blood is profoundly affected, becoming very dark, losing its power of coagulation and apparently suffering in its corpuscular elements, for ecchymoses are almost universal, and hæmatine crystals are occasionally found in the viscera. "In the case of Concato the white corpuscles were observed to be increased in number and the red to be diminished in size and altered in form" (Dr. H. C. Wood, *Therapeutics, Materia Medica and Toxicology*, Philadelphia, 1874). Dr. Burt cites Arnold, of Heidelberg, to the effect that numerous experiments upon animals have confirmed the observations made in phosphorus poisoning, in man, that the blood was dark, even black, and of a fluid consistency. The blood-disks become smaller, they decreased in consistency and circumference and assumed different forms. They change their forms in many ways, especially in their passage through narrow vessels and in their proportion to each other. One might say almost that the drug acts as a dissolvent upon the blood-disks. This action touches the blood-cell membrane more than the nucleus. Greater lustre, a less granular appearance, irregular and less distinctly defined outlines are the most conspicuous alterations. According to Lunz, cited by Kobert (*l. c.*, p. 424), the blood-vessels of all the organs undergo not only a microscopic fatty degeneration, but also a physical alteration, *i.e.*, their elasticity decreases, and indeed to a greater degree than in lead poisoning. This, together with the changes in the blood, is of importance in understanding the hæmorrhages seen with poisoning by this remedy.

II. C. Wood (*l. c.*, p. 92) dwells upon the important changes in the urine. Very commonly it is scanty, albuminous and sometimes contains sugar. As was first pointed out by Munk and Leyden (*Die acute Phosphorvergiftung*, Berlin, 1865), after jaundice has set in bile-acids, as well as biliary coloring matters, are always to be found in the urine. Not infrequently a cloudy sediment, consisting in part of epithelial cells, often tinged with bile, is deposited. The albuminuria generally follows, but may precede the icterus. A remarkable and seemingly constant constituent of the urine is sacro-lactic acid (II. C. Wood).

Hahnemann (cited by Burt) gives as indications for phosphorus a urine depositing either a white and cloudy sediment or it may contain one that is red and sandy.

Hering claims the remedy to be indicated in glycosuria with phthisis.

THE PICRIC ACID AND ARISTOL TREATMENT OF BURNS.

BY ALFRED COOKMAN, A.B., M.D.

(Late House Surgeon, Hahnemann Hospital, Philadelphia, Pa.)

PERHAPS no subject in the realm of surgery has been so extensively written upon and discussed as burns and their treatment. Medical literature since time immemorial has devoted countless pages to this topic, and each current magazine seems to bring forward some new drug or plan of treatment that will produce rapid and painless healing of this injury. Yet burns will be burns, and still continue to pursue the uneven tenor of their way, producing those ugly contracting scars and taxing to the utmost the skill and patience of the painstaking surgeon.

The two methods of treatment advocated in this brief paper, although comparatively new in this country, have been tried and their efficiency thoroughly proven in England and on the Continent. Drs. Powers, of London, and Thiery, of Paris, report a long series of cases successfully treated with picric acid; while Drs. Walton, of Ghent, and Von Kliegel, of Vienna, publish an equally extensive list of perfect recoveries under the aristol treatment.

Picric acid and aristol belong to that group of remedies which have recently been prepared by synthetical methods and introduced into therapeutics. The former, as is well known, is a product resulting from the action of nitric upon carbolic acid. It consists of fine yellow scales, soluble in water or alcohol, to both of which it gives a brilliant yellow color. Its use in medicine has been a limited one, while in commerce and the manufactures it has been extensively employed as a dye. As a local application for burns it is best used in the strength of one and a half drachms dissolved in three ounces of alcohol, and then diluted with two pints of distilled water. This makes the so-called saturated solution of picric acid.

The great advantages of picric acid in the treatment of burns are:

1. The severe pain which is so characteristic of these injuries is considerably lessened, this being doubtless due to the carbolic acid, of which it is largely made up, and which is a well-known local anæsthetic.

2. It limits the tendency to suppuration on account of its strong antiseptic properties and the power it possesses of coagulating albuminous discharges. When we remember that the antiseptic carbolic and the coagulating nitric produce picric acid, these properties are readily understood.

3. Healing takes place rapidly under a scab, and the resulting scar is smooth and shows but little tendency to contract.

Picric acid is best indicated in superficial burns and scalds, with vesication of the skin, and should be applied as follows: After careful removal of all clothing from the burnt part, the wound should be cleaned as thoroughly as possible with the solution of the acid. If a syringe is used for this purpose the surgeon can avoid staining his hands. All blisters should be pricked, and the serum allowed to escape, care being taken not to destroy the overlying epithelium. Sterilized gauze is then spread over the burned area and soaked with the lotion. A layer of absorbent cotton is put over the gauze and the dressing held in position by a bandage. This dressing may be left in place three or four days, and then gently removed by thoroughly moistening it with the picric solution, for it will be found to adhere closely to the skin. Subsequent dressings are similarly applied, and after three or four, according to the de-

gree of burn, healing will be complete. A word of caution is necessary: Picric acid is a poison, fifteen grains being considered a lethal dose. We must, therefore, watch over patients for toxic symptoms. These are a general yellow color of the skin and conjunctivæ, orange-colored urine, sexual excitement, mental lassitude and gastric disturbances.

Aristol is a combination of iodine, iodide of potash and thymol. It is a light red, extremely fine powder, insoluble in water and glycerine, slightly soluble in alcohol and readily dissolved in ether, collodion and the fixed oils. As a cicatrizing it probably has no equal, and is vastly superior to the time-honored iodoform, in that it has not the toxic and irritating character of the latter, is practically odorless and probably has some anæsthetic properties. When applied to a wound it produces at first a slight burning, followed by a diminution of the painful sensations. Granulations spring up healthy, vigorous and vascular. Cicatrization takes place rapidly from the edges of the wound, and the scar seems to be less abundant in fibrous tissue, thus decreasing the liability to contraction.

Aristol may be used in all varieties of burns from a simple erythema of the skin to a complete charring and destruction of the tissues. In the superficial form it is best used as a powder, while in the deeper burns the following ointment is to be preferred: Aristol, one part; olive oil, two parts; dissolve and add vaseline, eight parts.

Strict asepsis of the wound, however, is the first essential to success. After pricking all the blebs and permitting the serum to exude, the burn should be well irrigated with a weak solution of boracic or carbolic acid, and its surroundings scrubbed with soap and water. Then with sterilized absorbent cotton the surface should be gently dried, and the aristol applied either as a powder or an ointment. If the latter is used, the wound edges are first dusted with the powder, and then sterilized gauze on which the ointment has been thickly spread is applied. The dressing is completed with another layer of gauze, absorbent cotton and a bandage. After three days this should be removed, the wound and adjacent parts aseptisized as before, and the same dressing reapplied. By careful treatment in this manner very extensive burns will rapidly cicatrize.

Although I have described these two methods as separate

and distinct, they may be combined, as several of the cases cited below will illustrate. They were treated in the Hahnemann Hospital in the service or private practice of Dr. W. B. Van Lennep:

CASE I.—Admitted with second and third degree burns of the arms, forearms, hands, back and posterior portion of the thighs, due to an explosion of gasoline. The picric acid dressing was used. The patient was in the hospital three weeks, and was dressed every three or four days. The hands (second degree) were healed in about ten days, and when he left the hospital cicatrization was complete except a small granulating area on the back of the thighs.

CASE II. had received burns (first and second degrees) of the face, arms and hands, due to a gas explosion. He remained in the hospital one week, picric acid being used on all except those of the face, on which aristol was dusted. When discharged the superficial wounds had healed, while the deeper ones were granulating well.

CASE III., when admitted, was suffering with burns of the arms and face caused by hot resin. They were of the superficial variety, and after six days' treatment in the hospital with picric acid were practically healed.

CASE IV. had sustained burns of the neck, face, left shoulder and left arm, due to an explosion of benzine. Those of the face were of the first degree, all the others of the second. Picric acid was used. The face healed in three days, and after one week all the wounds had progressed sufficiently to allow the patient to leave the hospital.

CASE V. had fallen on a stove and received a deep burn (third degree) of right side of back, from the neck almost to the waist line. Bicarbonate of soda, picric acid, antiseptic treatment, Thiersch skin grafts were all tried with no success. Aristol ointment was then resorted to, and the wound improved wonderfully. Granulations, however, became exuberant, necessitating cauterization with silver nitrate. Nevertheless the ointment was persisted in, and when the patient left the hospital the raw surface was reduced almost one-half.

CASE VI. had been scalded on the body and arms by boiling water. She was treated in the Surgical Out-patient Department of the Hahnemann Hospital with picric acid, which healed

all the burns except the one on the right chest; this failed to improve until aristol was tried, which brought about rapid cicatrization.

The above cases are a fair sample of the results of picric acid and aristol in the treatment of burns. And they surely merit a further trial by all progressive physicians.

THE DEVELOPMENT OF ACUTE SALPINGITIS IN YOUNG WOMEN.

BY B. F. BETTS, M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania,
September 30, 1896.)

WHILST it is generally admitted that a gonorrhœal infection may furnish the elements necessary for the development of acute salpingitis in young women, we know from clinical observation, as well as from bacteriological research, that there are many infectious micro-organisms capable of inducing this disease beside the gonococci, and that in order to be successful in treatment we must appreciate the importance of an early recognition of the conditions which favor the development and multiplication of these infectious principles within the cavity of the uterus and in the Fallopian tubes.

At parturition we have constantly in mind the danger from an infection of the reproductive channel, whilst the tissues are vulnerable and absorption is readily effected through the open-mouthed lymphatics, the distended veins and the rents in the mucous membrane. In gynæcological practice we are always confronted with the fact that bacteriological agents common to the inflammatory condition in other parts of the body are mostly present in the fornices of the vagina and crypts of the cervical canal, ready to pass into the cavity of the uterus from the introduction of the sound or other instrument, and from thence into the Fallopian appendages from continuity of structure.

Even without such an instrumental agency the cavity of the uterus may become invaded by germs which only await a local congestion or a certain constitutional state that furnishes a suitable culture fluid, to become so virulent as to induce an acute

septic infection of the endometrium, followed possibly by salpingitis and ovaritis from an extension of the infection along the mucous channels.

It is in this way that the infection mostly spreads in those who have never borne children, and whilst it is to be presumed that it occurs more readily in those conditions of health in which the constitutional state induces in some manner a defective tissue metamorphosis, there can be no doubt that purely local changes in tissue metabolism, vaguely manifested to us, may be of such a character as to favor the growth and multiplication of infectious agents.

The local conditions which seem to favor infection in young unmarried women are often induced by displacements of the pelvic organs with such an hyperæmia and hypersecretion as will furnish a suitable culture fluid for pathogenic organisms. This is especially the case when a flexion at the cervix or a congenital stenosis of the canal tends to impound the liquid secretions within the uterine cavity and increase the vulnerability of the mucous membrane.

When there is a displacement of the uterus that causes the channel to become tortuous or the outlet to assume an unfavorable position for drainage, the menses will be imperfectly discharged, so that the uterine cavity will always contain the residue as a culture fluid, from which infection is liable to occur. The hyperæmia of the tissues is followed by hyperplasia or increase in size and weight, so that we have added to the symptoms already present painful menstruation, backache, pelvic tenesmus and rectal and vesicle irritation.

Similar changes take place within the tubes: the tissues become hyperæmic, the secretions are increased in quantity and the canals become closed at certain points or tortuous from kinking, so that the fluids collect and distend the tubal structures, and as a consequence pain is induced and sensitiveness becomes an ever-present symptom.

Eventually the ovary may feel the effects of the same disturbing influences and become larger and heavier, so that an effort at lifting or straining, or particularly a sudden jar or fall, will cause it to descend and drag the tube with it toward the cul-de-sac of Douglass, after which the hyperæmic and possibly infected peritoneum may throw out an exudate that will envelop

the ovary, tube and fimbria, constituting the veritable tubo-ovarian mass, within the centre of which an abscess may form from the presence of infectious germs at the ampulla or abdominal end of the tube.

From my record books I am able to trace many cases of this kind to a displacement caused by a serious fall or a sudden jar, as from a railroad accident, as well as to the habitual use of the corset, or neglect respecting the evacuation of the rectum and bladder at suitable intervals. As but little attention is paid to the earliest manifestations of salpingitis in young women, the damage is often too serious for medicine to cope with alone when the case is diagnosed by the physician. It therefore seems necessary to emphasize the fact that injuries from the causes mentioned above should claim our prompt attention, and that in all such cases it is necessary to secure the most efficient drainage from the uterine cavity by efforts to straighten the uterine canal, and in every case after a serious fall or similar injury an examination should be made by a reliable physician in order to correct displacements and determine the condition of the pelvic organs.

If deep-seated pain is induced by lifting the uterus upon the point of the examining finger it will be of considerable diagnostic significance, for it indicates a degree of hyperæmia of the uterus or tubes that marks the advent of serious pelvic disease. Of course the deep-seated tenderness is to be distinguished from mere vaginal sensitiveness which is almost always met with in this class of patients. It will be noted, therefore, that we have several reasons for selecting the rectal method of exploration, for we not only eliminate this source of error, but we can reach to a higher point in the pelvis, and, above all, we avoid inflicting the moral shock upon the sensitive nervous organization of the young woman that comes from the reckless choice of the vaginal route in such cases.

If the rectal method does not enable us to make a satisfactory diagnosis or secure the facilities for a replacement, an anæsthetic should be administered before proceeding with the subsequent vaginal examination, but in all such cases it is best to make the initial rectal exploration first, without an anæsthetic, in order to determine the amount of uterine and ovarian mobility and sensitiveness present. If the displacement is of

long standing, and the uterus is large and not freely movable, the best judgment will be required to determine the line of treatment best adapted to the case, as the attempt to effect a replacement under such circumstances will be likely to inflict additional suffering by increasing the inflammation previously developed, and we may well consider the advisability of postural treatment with general massage and internal medication, or the necessity for an operation for the removal of the damaged organs by an abdominal section.

If the case is seen early, replacement can usually be effected without difficulty, and we need only to guard the patient against a recurrence of the malposition. If there is considerable tenderness met with as referred to above, frequent replacements do more harm than good, and postural treatment should be relied upon exclusively, with suitable medication, of course, according to the indications as they arise. Pessaries are not required in acute cases, especially when there is sensitiveness in the posterior and lateral portions of the pelvis. After postural treatment in these cases this sensitiveness will diminish, if the tubes are not seriously affected, and exercise should be gradually resumed, with the clothing properly adjusted, so as not to constrict the waist nor interfere with muscular movements. When the tubes are permanently diseased we will experience more trouble in securing good results without an operation.

In cases of long-standing prolapsus of the first degree, without retroversion, the development of an increasing amount of dysmenorrhœa, with pelvic pain during the intermenstrual period and uterine sensitiveness, points to some stenosis of the canal, due, perhaps, to an acquired ante flexion of the cervix.

This stenosis may be overcome by divulsion under ether and the application of a suitable pessary to elevate the uterus and keep it from pressing the cervix against the pelvic floor. When there is a congenital ante flexion with stenosis it may be necessary to straighten the canal by an incision through the posterior lip of the cervix up to the point of constriction, so that the cut surfaces may be stitched to the denuded vaginal wall above in order to keep the cervix back and the canal straight, so that the discharges can pass without obstruction.

The treatment of married females suffering from a displacement caused by a fall or similar accident, is usually attended with less trouble, and it is seldom necessary to administer an

anæsthetic for the initial examination. If more than the usual difficulty is experienced in effecting a replacement *per vaginam*, the patient may be directed to assume the knee-chest position for that purpose. This position can be utilized to the best advantage by having the patient kneel upon one chair or stool whilst each forearm is placed upon another stool or chair so that the three supports are arranged in the form of a triangle about two feet apart. In this manner the pelvis is elevated to the proper height for the operator, and by raising or lowering the shoulders and trunk, moving them forward or backward as directed by the operator, every facility is secured for replacement that is possible. The position is much less irksome to the patient when the body is supported in this manner than when it is on a bed or table with the head turned sidewise at an uncomfortable angle with the neck, and it is much more convenient for the operator.

The treatment after replacement is, of course, about the same as that outlined above for unmarried women.

In a series of 884 cases examined in private and consultation practice, twenty patients attributed their pelvic disorders to a fall of some kind, and are classed together in the following tabulated list.

Many other patients might have been appropriately assigned to the same category who were suffering from the effects of direct concussion, over-lifting, pushing, jumping, etc., but the addition would make the list too lengthy.

All the accident cases due to a fall, as tabulated on the following pages, suffered from some form of uterine displacement and from some variety of tubal disease. Some may have had the displacement, and even the tubal complication in its incipency, without recognizing it before the reception of the injury, but in all of the cases the accident seemed to precipitate the more serious manifestations of the trouble.

Of the twenty cases reported, nine were married and eleven were single at the time they came under observation, and it is a significant fact that all the married women remained sterile after the injury.

All the cases had similar subjective symptoms, amongst which pelvic pain, backache, headache, dysmenorrhœa and nervous phenomena predominated. The cases cured were those seen soon after the fall or those operated, but the records

Case Number.	Married or Single.	Age.	Accident.	Uterus.	Ovaries and Tubes.	Menstrual Pain.	Treatment.	Results.	Remarks.
1009	S.	30	Fall from swing.	Prolapsed and adherent.	Ovaries and tubes bound down by adhesive ovarian hematoma.	Very intense.	Medical and postural for long time. Coeliotomy, suspension of uterus & removal of appendages	Cured.	
1011	M.	35	Fall into a low chair.	Prolapsed and retroverted.	Salpingitis and ovaritis.	Not severe.	For diagnosis only.	Not known.	Sterile since accident.
1051	S.	32	Fall from a carriage. In bed 16 wks. Three years later came under observation.	Prolapsed and retroverted.	Salpingitis and pelvic peritonitis, with firm adhesions all through pelvis.	Severe.	Not operable, medical.	Slight improvement.	
1154	M.	23	Fall down stairs. Fall from hammock.	Prolapsed; fundus ante flexed.	Salpingitis. Abscess in l. ovary.	Severe before flow, not during.	For diagnosis only.	Not known.	Sterile.
1433	S.	25	Fall down cellar steps.	Prolapsed	Salpingitis.	Severe.	Replacement with postural & medicinal.	Cured.	
1543	M.	28	Fall into seat, 12 yrs. ago.	Prolapsed ante flexed fundus.	Salpingitis and ovaritis.	Severe for 1 week before. Intense headache 1st day of flow.	For diagnosis only.	Not known.	Sterile.
1609	S.	25	Fall down stairs, 3 mos. ago.	Prolapsed, very sensitive.	Tubes and ovaries sensitive.	No pain until after fall.	For diagnosis only.	Not known.	
1666	S.	26	Fall from hammock, 6 yrs. ago.	Retroflexion.	Salpingitis and ovaritis.	Severe.	Postural, medicinal, curettage, replacement.	No relief.	Refused coeliotomy.
1708	M.	31	Fall, 17 years ago.	Prolapsed.	Salpingitis and ovaritis.	Very severe.	Medicinal.	Improved.	Sterile.
1718	S.	21	Fall, recent.	Prolapsed and retroverted.	Tubes and ovaries displaced.	Severe for the 1st day.	Replaced after etherization,	Improved.	
1731	M.	24	Fall, 1 yr. ago.	Prolapsed ante flexed.	Salpingitis, right ovaritis.	Pelvic tenderness, backache.	For diagnosis.	Not known.	Sterile.
1732	S.	27	Fall down stairs, 6 mos. ago.	Prolapsed cervicitis.	Salpingitis.	Severe 3 days.	Rectal replacement, medicinal.	Cured.	

Case Number.	Married or Single.	Age.	Accident.	Uterus.	Ovaries and Tubes.	Menstrual Pain.	Treatment.	Results.	Remarks.
1737	S.	37	Fall on ice.	Prolapsed fundus ante-flexed.	R. tube inflamed, r. ovary enlarged, l. tube and ovary adherent.	Very severe before and during menses.	Cœliotomy, r. hæmatoma, intestinal adhesions, salpingitis removed.	Cured.	
1758	S.	22	Fall onto the feet.	Retroversion with prolapsus; endometritis.	Salpingitis, ovaritis.	Not severe.	Cœliotomy, suspended uterus, removed appendages.	Cured.	
1766	S.	23	Fall astride top of chair, 7 years ago.	Prolapsus with ante-flexion of fundus and cervix.	Ovaritis, salpingitis.	Very severe.	Operation declined.	Not known.	
1802	M. 2 yrs.	41	Fall from bridge, six years ago.	Retroversion with prolapsus.	Suppurating tubes and ovaries.	Severe formerly.	Medicinal.	Improved.	Sterile.
1803	M. 3 yrs.	25	Fall from tree, 11 yrs. ago.	Prolapsed.	Salpingitis and ovaritis, ovaries prolapsed and adherent.	Very severe.	Cœliotomy, removed appendages	Cured.	Sterile.
1816	M. 11 yrs.	39	Fall down stairs, 19 years ago.	Anteflexed hyperplastic.	Left tubo-ovarian mass. R. salpingitis.	Severe.	Medicinal.	Not improved.	Sterile. Refused cœliotomy.
1827	S.	23	Fall out of bed.	Prolapsed.	Right tubo-ovarian inflammation.	Not severe.	Replaced and medicinal.	Improved.	
1829	M. 3 yrs.	23	Fall down stairs.	Prolapsed, retroverted	Right tube painful. Left, ovaritis.	Not severe.	Medicinal.	Improved.	Sterile.

of the cases seen only in consultation are incomplete in this respect, as they were not heard from after a replacement was effected at the time of the examination.

The degree of anteflexion met with in this list was in excess of the normal for nullipara and evidently contributed to the stenosis, dysmenorrhœa and subsequent salpingitis.

The position assumed is that the early treatment of patients who have sustained an injury which is likely to produce some displacement of the pelvic organs will often prevent the development of serious pelvic disease, with subsequent suffering and possible sterility.

CATGUT LIGATURES PARAMOUNT TO ALL OTHERS IN USE WHEN
PROPERLY PREPARED, AND PERFECTLY ASEPTIC.

BY JAMES H. THOMPSON, M.D., PITTSBURG, PA.

(Read before the East End Doctors' Club, of the City of Pittsburg, Pa.)

THE elaborate methods which are in use in preparing catgut ligatures in the different hospitals and sanitariums obviously cannot be resorted to in private practice. Just as thorough asepsis, however, as regards catgut ligatures, may be secured, having been carefully prepared by the physician before they are taken to the patient's home.

Ligature and suture material must be absolutely sterile. In view of the difficulty of obtaining sterile catgut, it is wise to prepare it yourself. In emergency surgery, the operator has not the time to prepare beforehand his catgut and silk as previously devised; but by following the plan of preparing catgut ligatures, as I am about to describe, it will be as convenient to the busy general practitioner as to the hospital surgeon, as is consistent with absolute asepticism. If these simple rules for securing asepsis of the emergency surgery and their surroundings are followed, the morbidity and mortality rate in private practice will approximate those which are secured to-day in the large hospitals, where the mortality rate has been reduced to a fractional percentage, and where morbidity from sepsis is practically abolished.

Aseptic and election technic in operative surgery, especially those of obstetric and gynecological surgery, has been robbed of its terrors, and the septic and infection state of well nigh its sole risk. All operations of the lying-in chamber, whether it be either mother or infant, call for the use of catgut ligature properly prepared, which every obstetrician should be provided with. It has been considered far superior to all others in plastic surgery about the face and scalp.

In gynecological surgery there are a few exceptions where the catgut ligatures cannot be used with safety. They are the different forms of fistulae and deep abdominal suture, where there is reason to expect ventral hernia following the operation.

Silk-worm gut is as impermeable and non-absorbable as silver wire; it is less easily broken, but less flexible and applicable to all cases where wire is used. It is given the preference by many authorities. The knot does not hold as well as that of catgut or silk, but, nevertheless, it is good material for sutures.

The best silk is the braided, not the twisted variety. It comes in very fine strands, and when rendered antiseptic, is an excellent suture material. Owing to the porosity of silk it possesses one serious drawback, that of secondary infection. There is no material used for ligature and suture in either general or gynaecological surgery that can be compared to catgut. Catgut loosens more readily than silk, and should be tied in three knots to avoid mishaps.

The management of bleeding vessels in operating wounds are of great importance. All hæmorrhage should be arrested before closing deep wounds.

Occasionally in operating it becomes necessary to ligate a few of these vessels which bleed persistently and cannot be controlled in any other way, then it is well to ligate them with a fine catgut ligature, the ends being cut off short and enclosed in the wound. In view of these facts it may be said, without doubt, that the antiseptic ligature is the best means of controlling the vessels in these wounds.

Regarding the material to be used as a ligature, it may be said that which can be enclosed in the wound without giving subsequent trouble is the thing required. The properly prepared catgut fulfils the indications. Some recent experiences indicate that the Japanese ligature, made of whale sinew, is the best, owing to its being absorbed with great facility. The rapid absorption of the ligature is the one great objection to its use.

The coaptation of the tissues by means of sutures requires more than a passing notice. The success which J. Marion Sims obtained with the silver wire suture led at once to its general use in gynaecological operations. There is, however, good reason for believing that the results obtained by the great surgeon depended as much upon his skill in using sutures as upon the material which he used.

The catgut ligature possesses the advantage of being absorbed, and it is one that can be buried in the tissues for all

purposes, and can be used in any part of the body where ligatures or sutures are required, with one exception, that of bone suturing.

The best results are obtained in preparing catgut with oil of juniper wood and not of the berries. This was first recommended by Tiersch, and later adopted by Martin, Schroder, Leopold and Pozzi, with slight changes in the manner of preparing it.

Formulas for preparing as given by the best authorities: In preparing catgut you should keep the roll of catgut for an hour in an aqueous solution of bichloride 1-1000, and then put into oleum juniperi for at least eight days. They are then removed and preserved in rectified spirits, to which is added a tenth part of the juniper oil. Just before using the catgut is put into a watery sublimate solution, which swells it a little but renders it very flexible.

Prof. Martin's method of preparing catgut varies slightly from this. The catgut is immersed for six hours in the 1-1000 solution of sublimate, removed and dried by pressing in a towel, placed in a mixture containing two parts alcohol and one part oleum juniperi. This can be used at the end of six days.

In the Berlin clinics the catgut is left for twenty-four hours in oil of juniper, then for twenty-four hours in glycerine, and then in absolute alcohol, to which is added a small amount of the oil.

Prof. Kocher's method of preparing catgut is to immerse the rolls of catgut twenty-four hours in good oil of juniper prepared from the wood, then transferred into and preserved in absolute alcohol until used. To prevent early absorption a hardening process should be added to the disinfection. The catgut should be washed in alcohol, then placed in a quart of a 5 per cent. solution of carbolic acid containing thirty grains of bichromate of potash. Forty-eight hours' immersion is sufficient for small catgut, larger size needs a longer immersion.

The method of preparing and preserving catgut ligature in the Homoeopathic Hospital and Dispensary of Pittsburg, Pa., is similar to that used in Prof. Bergmann's clinic, of Berlin. Bergmann's method consists of immersing the catgut for ten days to a fortnight in the following solution, renewing it from time to time:

Hydrargyri bichloridi,	. . . . .	1
Alcoholis,	. . . . .	800
Aquæ destillatæ,	. . . . .	200

Benckiser has adopted the method of disinfection by heat. First placing his catgut rolls in envelopes before putting them in the sterilizer, opening the envelopes only at the very moment of using the catgut.

The method preferred and practiced by Reverdin consists in placing the catgut for four hours in a sterilizing oven at 284° F. before putting it into the oil of juniper and alcohol.

In all cases where catgut is used as suturing material the grease should be thoroughly removed by washing in sulph. ether before submitting it to any other process. There are many advantages possessed by preparing catgut in juniper oil. It is far superior to the usual method of preparing in carbolic acid. Remarkable for its tenacity and flexibility.

Many surgeons prefer to disinfect the catgut with carbolic acid or corrosive sublimate.

Championniere followed Lister's plan by macerating the catgut in the following solution :

Acidi corbolici,	. . . . .	20
Aquæ dest.,	. . . . .	21
Olei olivæ,	. . . . .	100

The great objection to this method of preparing is the time it takes for macerating, which consists of five or six months, and even then it is oily and disagreeable to handle.

Silk-worm gut, Japanese ligature, made of whale sinew, and silver wire, after being subjected to heat of 250° F. in a sterilizer, may be preserved in rectified spirits.

The time for dissolving and absorbing depends entirely on the methods used in preparing and on the size used by the operator. It is owing to this quality possessed by catgut ligature that no other ligatures have, that the buried suture, and sutures in layers which have been undertaken, and which have given such excellent results.

Professor Leopold has adopted catgut ligature for his Cæsarian sections, prepared after the method of Professor Milkulicy : Catgut placed in carbolized glycerine forty-eight hours, 10 parts to 100, then for five hours in a solution of chromic acid

1-200, and finally preserved in absolute alcohol. Alcohol keeps catgut hard and firm, yet flexible.

I have used it successfully prepared according to the last formula in the following operations: Resection of intestines, vaginal hysterectomy, amputation of the cervix, anterior vaginal fixation, anterior colporrhophy, kolpoperineorrhaphy, suprapubic lithotomy, trachelorrhophy, ovariectomy, American operation, removing the pile-bearing inch and removing the appendix vermiformis.

For intestined surgery the catgut should be prepared by the hardening process by adding the bichromate of potash solution, which will harden sufficiently to resist living tissues for a week or for a fortnight.

For all sutures that are to be buried, or to be placed in position where they are inconvenient to be removed, or cause much pain, I have adopted the catgut ligature, discarding silk, silk-work gut, Japanese suture and silver wire.

The unfavorable results reported from the use of catgut ligature during the early years were unquestionably due to the lack of appreciation of the necessity of both asepsis and of election in the hands of inexperienced operators. Therefore our study of the practical use must be based purely on the results which are yielded in modern times when these factors play the chief rôle in operative surgery.

In conclusion, I wish to state that from the results obtained both at home and abroad we are justified in adhering closely to the rules laid down by the great surgeons of the day. My object is not so much to describe strange and unusual occurrences, to classify various cases of those operated upon which occur most frequently in practice, giving treatment and results, but with a view of determining what methods have in my own experience proved most efficient.

Closely adhering to the rules given above, or by the preparations and use of catgut ligature, I have not had a single failure or bad result to report from its use.

GNAPHALIMUM IN SCIATICA.—Intense pains extending to ramifications of the nerve, with feeling of numbness, the numbness sometimes alternating with the pains; these pains extend into the toes. Allen states that it, Gnaphalium, has cured rheumatoid pains confined to the toes.

THE MATERIA MEDICA.

BY C. S. SCHWENK, M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania,
September 30, 1896.)

THE materia medica might be viewed as an album picturing distinctive forces, each capable of producing effects peculiarly its own, each performing its mission when summoned to execute the work singular to its individuality. This is either absolutely true or absolutely false.

What is your choice? If you are a scientist, you must eventually accept one or the other, you can't take both. If they are true forces, then they are the uncompromising elements of nature, subject to no change, and must be accepted as a verity.

In this age of scepticism when the infidel gains prestige for heroic thought by subtle argument establishing agnosticism, which quietly flows through so many minds—arguments based on preconceived ideas seeking material out of which to construct edifices, refuting essentials to a homely but permanent structure in fear of marring architectural beauty and blasting fanciful conceptions, we naturally must expect the same influence to permeate the medical profession and tinge all observations with doubt, giving the appearance of an astuteness that would be sublime if it wasn't distorted.

When the patient gets well, the average homœopath appears to feel that it is incumbent upon him to immediately find an excuse for the recovery on any other grounds than the action of the indicated remedy.

The humblest personage may cry in defence, but the poor indicated remedy may be safely abused and have whatever opprobrium heaped upon it that the veriest tyro may choose. It may be accused of entire inability to produce any effect in a given case of sickness, and at the same time be guiltless of ever being near the case, but must suffer for the incompetency of a pretender masquerading in its place.

It is pertinent here to ask the question, "How often does the

indicated remedy find its way to the sick?" The despairing cry arises, "How is the indicated remedy to be found in all the great mass of material published?" In one way, and in one way only, and that by therapeutics. A theosophical knowledge is not required, ordinary human intelligence is sufficient. Learn what a remedy can do, and then give it a chance to do it, but don't get lost in infatuation over results obtained, and run to seed with the idea that there is nothing that medicine cannot do. Diet, rest, water, alcohol and faith are of value to the sick, but when a remedy performs quick results it is scarcely fair to ascribe it to personal magnetism.

On the other hand, some contend that medicine plays no part whatever in the cure of the sick. Such administer medicine to their patients much as parents indulge children, because the traditional ideas of the sick demand drugging. But let us hasten by this, for it is dangerously near charlatanry.

We are just recovering from a decade of cyclonic medicine, wherein any idea, however chimerical, so long as it possessed the merit of being new, with a promoter who was a strategist and possessing a genius like Napoleon, could make double flank movements with the heavy guns of statistics, while down the centre charged all the old soldiers that had done duty on many another occasion, winning a brilliant victory for the author, whose songs of triumph rang from Germany, France and America to all parts of the earth, reverberating through the halls of medicine on down into our very barber shops.

Journalistic notoriety, medals of honor, exciting comment by the press, and finally—the funeral.

Compare this tinselled grandeur to the significance of the simple truth expressed a century ago by one of the greatest minds in history, than whom no greater has ever stepped into the medical arena—OUR HAHNEMANN.

This was the beginning of the *materia medica*, which, by accretion, has grown to the enormous work of to-day, formidable indeed in its magnitude! Adopted by minds of variable elasticity, some content to walk in the footsteps of the author, while others stretched to the degree of breaking: indeed, some must have broken, for points of ascension were reached that could only be gained by severing all earthly ties. Spirituality was commonplace by comparison; then came reaction, homœo-

pathy came back to the earth again, the pendulum swung to the other side, and slowly plowed through tinctures and fluid extracts, while many fell off and floundered amongst compounds, alkaloids and proprietary things; but the pendulum is swinging back to its centre, when will begin the renaissance of homœopathy heralded by the literature of to-day, and the old *materia medica*, unscathed by the storms of sophistry, ridicule and prejudice, passes on down into the future as a temple, revered by suffering humanity, bowing to the immortal genius who laid its corner-stone.

PREPUTIAL ADHESIONS IN LITTLE GIRLS.

BY M. MARGARET HASSLER, M.D., ALLENTOWN, PA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania, September 29, 1896.)

MANY physicians are awakened to the importance of circumcision, knowing how mischievous the adhesion of the foreskin to the glans penis is in the male, causing the convulsions, dropsies, paralysis, insomnia, eczema, kidney troubles and outgrowths of masturbation, and here a plea should be made for the girls. This paper is to treat only of preputial adhesions in little girls, but all-round orificial work is urged in every case showing any degree of orificial pathology at the lower orifices of the body. It may be profitable to describe the analogy of the clitoris and its prepuce to the glans penis.

(1) Both are erectile. (2) Both consist of a glans, a body, two cura. (3) They each have a corpora cavernosa, separated by an incomplete septum. (4) The glans in each is partly covered with a prepuce, with a frenum attached below. (5) Each is supplied by filaments from the pudic nerve and hypogastric plexus. (6) Each produces a cheesy secretion called smegma, which accumulates and hardens under the prepuce. "Small as this organ is, compared to the glans penis, it has in proportion to its size four or five times the nerve supply of the latter."

Many years ago the French physicians recognized the clitoris as a source of nerve waste in women. Their measure for re-

lief was so radical as to cause harm instead of good. They amputated the labia minora, the hood of the clitoris and clitoris itself. The result was a relief, but with it a relief from all normal sexual instincts, and so frequently followed by insanity, that the question of the practice was a subject for legislative action, and amputation of the pudenda was forbidden by law.

An improper growth of child, imperfect speech, eczema, disordered stomach and bowels, weakened mind, enuresis and other derangements call for an examination if they do not yield to properly chosen remedies. One often finds young children with the clitoris entirely covered by its hood and the vagina closed with a thin membrane. An inherent hood may produce such an impression upon the nerve centres as to cause degeneration of the entire sexual system. Where it has existed from infancy to puberty we often find evidences of uterine and ovarian disturbances caused by it. In adult life the adherent hood is not found so frequently. This is explained by the fact that the irritation of this part from any cause attracts attention to that part and leads to habits which sooner or later frees the prepuce. A few cases in children have come to my notice where there was no sign of a clitoris at all. In all cases, when operating, care should be taken to prevent as bad if not a worse condition than first found. A pinching clitoris hood should be liberated by an incision, or retraction, or amputation. If there is the slightest opening, or even a red line to mark the place for opening, the clitoris can often be freed from its hood without even a scratch to cause the blood to appear. As in cases of the male, the confined smegma aids much in the operation. In some cases the skin can be pinched up with a pair of forceps, so as not to injure the organ, and a small portion cut off. With a tenaculum the underlying tissues are raised and separated properly. Liberate all smegma and dress parts with Peruvian balsam and castor oil. While the parts are healing see to it that no adhesions are being formed. The results that follow the perfect freeing of an adhered clitoris have been in many cases immediate and astonishing, in others not so marked. This can be endorsed by those who have not been influenced by fancy or theory, but from personal observation.

When doctors realize that the clitoris and its hood are supplied by the same set of nerves, subject to the same laws of

action and reaction and the abnormalities of the hood of the clitoris are as mischievous as those of the fore skin, we will have fewer records of failure in the treatment of children's and women's diseases.

CASE I.—Mary H., age 3 years; very changeable, with no control of urine; leucorrhœa. Examination revealed clitoris completely covered and bound tight with its hood. This I freed with the use of cocaine; enuresis and leucorrhœa have left her and she has become a sweet little girl.

CASE II.—Bessie M., age 6 years. Was sent to me a year ago. Had been having convulsions for three years every three to four weeks, but became more frequent; looked demented, could not stand. Examination showed an irritable vagina and adhesion of hood to clitoris, with a deposit of hardened smegma. Operation consisted in freeing the clitoris, after treatment, cleansing the vagina with warm water and hydrastis wash. Child recovered, gained in flesh, and becoming as bright as her sister, was sent to school. Improvement lasted six months, when convulsions returned. Upon examination found the hood completely covering clitoris and grown together, forming a cicatrix. I broke this up, amputated hood, which was too long. Since then have had no trouble. The cause of failure to cure upon first operating I believe to be poor work on my part. The relief obtained after the first operation shows us that if the case is properly handled a complete recovery will be the result.

CASE III.—C. A., age 4; could not walk, enuresis, lateral curvature of spine. Hood was found adherent on one side; enlarged, congested and ulcerated clitoris. This was freed, and signs of improvement were noticed in a month's time, and in several months' time the child walked, enuresis ceased, curvature improved.

CASE IV.—Annie M., age 9; had chorea for two years; found hood adhered, completely covering clitoris; freed this, and in two weeks patient could walk without falling, and has been in good health since.

CASE V.—Emma M., age 5; anæmic, irritable, indigestion; could not walk steadily. Loosened hood of clitoris, which was adherent on side only. Improved fast, and three months later was well.

It is our duty, as physicians, not only to restore the lost, but to prevent the destruction and save our girls from the gradual invalidism to which so many are heirs to at puberty or soon thereafter.

ORIFICIAL SURGERY WITH RELATION TO THE NASAL REFLEXES.

BY W. G. STEELE, M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania,
September 30, 1896.)

AMONG the affections which the physician is frequently called on to treat, I know of no more distressing one than severe headache.

Having been successful in curing a number of very severe cases of this malady by means easily applied, I thought possibly it might be of interest if I were to write something on this subject, explaining the method and giving a few illustrative cases. Some time ago, while making local applications in the treatment of hypertrophic rhinitis, I was gratified to observe that a particular case not only showed improvement in the nasal mucous membrane, but that a distressing headache, to which the patient had been subjected for several years, was greatly ameliorated, and finally was entirely cured. I then "looked the subject up," consulting most of the recent authorities, and having been so closely occupied in studying the reflexes from the lower orifices of the body, I was surprised to find the number of distressing complaints which had been traced to abnormalities inside the orifices of the nose, the cure of the patients following the correction of the nasal abnormalities, proving this to have been the cause of the reflex trouble itself.

I will enumerate some of the diseases so cured, as quoted by Bosworth, from Hack: "Gastralgia and dyspepsias, cardiac palpitation, tumefaction and redness, either temporary or permanent, of the skin of the nose, transitory and circumscribed œdemas, salivation, neuralgia of the first two branches of the trigeminus, cephalalgia, migraine, scotoma, ciliary neuralgia, photophobia, vertigo, agoraphobia and exophthalmic goitre,

Hack asserting that all these were due to various forms of intranasal disease, the larger portion being due to hypertrophy or chronic hyperæmia."

Further quotations mention "complete aphonia, asthma, chorea, epilepsy and even nocturnal enuresis, and Dr. North says he has yet to see a case of neurasthenia in which there is not some catarrhal trouble."

Remember, gentlemen, the authorities quoted are not "official cranks," Dr. Bosworth going even so far as to state that "if we attempt to explain these various reflexes we find ourselves compelled to adopt rather vague and indefinite theories."

I believe the explanation to be easy if we consider that in these abnormalities there is a continuous pressure and irritation of terminal nerve filaments, the nasal membranes being so richly supplied by the olfactory and numerous branches of the trifacial nerve; and hyperæmia and hypertrophy must increase the pressure on these nerves directly, and the effects of nerve pressure are so pronounced that they manifest themselves with constantly recurring paroxysms, growing in intensity with each recurrence until finally, if long enough continued, the whole system is drawn into the vortex.

In another paper I have cited the example of a single hair of the head being put on a strain by a small weight, and, if continued long enough, the frightful consequences are infinitely out of proportion to the exciting cause. The strong man Sandow found it utterly impossible to bear the constant dropping of water in the palm of the hand from a height of two or three feet; after a half-pint had fallen in this manner drop by drop his sufferings became so intense that he was obliged to abandon the contest and lose a large forfeit.

But even should the theory of the causation be unsatisfactory, our patients are more concerned with results than with theories, no matter how beautiful, and I believe we all agree that nerve pressure is capable of producing pain, and that removal of nerve pressure will relieve pain, and this brings us to the consideration of how best to remove the pressure.

In this work a good light is essential; I use a McKenzie condenser and head mirror, with a self-retaining nasal speculum, preferring Goodwillies' with the central prong removed.

Patient in comfortable position, head steadied by suitable

rest, introduce speculum and examine; usually the nasal membrane is found to be red, congested and hypertrophied; by making an application of a 4 to 10 per cent. solution of cocaine, the hyperæmia is greatly reduced, enabling us to examine further up the fossa, and reapplying the cocaine to the presenting portions, we are soon enabled to obtain a view of the entire cavity, unless prevented by malformation of septum or turbinated bones, which will require other treatment from that which I propose to explain; then heat the tip of a wire applicator to a red heat and dip it into chromic acid which has been triturated to the consistence of a coarse powder. A drop of the chromic acid will thus be fused on the end of the applicator; apply this to the portion of the membranes which seems most hypertrophied; this application is generally painless, but when the effect of the cocaine diminishes, violent sneezing sometimes results, and in some cases pain is experienced, which may be relieved by re-applying cocaine. Often have patients remarked that a treatment will induce a headache similar to that from which they have suffered, and I generally anticipate this by telling them that it may do this, and pointing out to them that if it does, it furnishes unfailing evidence that at last the cause of their trouble has been reached. These induced headaches sometimes last from a couple of hours to a day, according to the amount of irritation produced by the treatment; the great majority of patients, however, do not experience these unpleasant sequelæ.

This treatment may be repeated in from five to seven days, according to the subsidence of the irritation; sometimes one treatment, more often several, will be required to give complete relief from headaches which have existed for long periods of time.

Another method, which I often use, is, after making the cocaine application, to form a swab on the end of a probe, saturate this in compound tincture of benzoin and apply over the whole of the hypertrophic membrane covering the turbinated bones; it is not desirable to apply either of these substances to the septum. I frequently make the benzoin application without the previous cocaine application: the pain, while sharp, subsides in a few seconds.

Eye-strain is doubtless the cause of many severe headaches,

and should always be remembered, but I find many cases which apparently are due to eye-strain, but which glasses fail to relieve, and these examples are particularly apt to be very amenable to this method of cure.

I select the following cases from my note books, in order to show the diverse classes of headaches which are cured by this method of treatment :

CASE I.—Miss C.; age 24. About fifteen years ago she experienced a fall backward, striking the back of her head on a stove, after which periodical headaches began, and continued up to five years ago, when she was struck by a falling ironing-board also on the back of the head; this was followed by an attack of congestion of the brain, for which she was under treatment for about three months. Her headaches became greatly aggravated; she then had recourse to glasses under the prescription of an oculist, which gave her some relief. The case came under my care several years ago. I diagnosed chronic hyperæmia of the brain, my treatment was continued for several months without affording any pronounced relief; at this time these headaches were in the occipital region, the pains extending down toward the shoulders, accompanied by a sharp pressive pain as though something were being pressed upon the brain. A characteristic position was with the head thrown far back, as in cerebro-spinal meningitis, but without the cephalic cry; motion of the jaws and stooping always aggravated this pain; she also had a sensation of a metal band extending across the supra-orbital region, as though it were screwed up very tightly. These attacks occurred about every week, continuing from one to three days, and were followed by a marked prostration, lasting about two days after each attack; she was obliged to remain in bed during these attacks. She afterwards entered one of the prominent hospitals of this city, and upon consultation of three physicians of this hospital it was diagnosticated as an old fracture with overlapping edges, and trephining was advised; to this she refused to consent, and left the hospital, and again came under my treatment. I now, with my more recently acquired experience in similar cases, directed my attention to the nasal orifices. I found the membranes hyperæmic and hypertrophied, with the margin of the middle turbinated butted squarely against the septum. I treated this case with compound tincture of benzoin without

the cocaine application, and with a single treatment, which was followed by a severe headache of the usual type, lasting one day; the benefit experienced was almost beyond belief. This application was made several months ago, since which time she has had almost complete immunity from the headaches and concomitant symptoms, her vision has greatly improved, and the sensation of the band over the eyes has disappeared. When it is remembered that these headaches had occurred regularly for five years, the period of exemption never being over two weeks, the gratifying result of this treatment will be appreciated.

The strong resemblance of this case to that of the celebrated singer, Madame Klafsky, who died recently after an operation of trephining for agonizing headaches following an injury to the occiput, produced by contact with heavy falling scenery a number of years ago, afterwards being struck near the same place by a falling board, will not be overlooked; her symptoms were very similar to those which characterized the above case. The operation of trephining in that case showed no pathological condition of the brain at all, but resulted in death. Medical reports now state that the cause of these profound effects was some trifling condition unmentioned, which could have been easily corrected had its importance been recognized.

CASE II.—Miss G.; a girl of 22; has suffered for many years with most aggravated headaches of a blinding character, and extending into the eyes and over the frontal region, and thence to and beyond the occiput. Her weight was greatly reduced, and she was obliged frequently to suspend her usual occupations, and, in fact, became a physical wreck; her mother said she spent a large part of her time in crying. She was referred to me by a brother physician for experimental treatment of the nasal cavities, in connection with my investigations, of which he was aware. I found marked hyperæmia of both nasal cavities, with a profuse semi-purulent discharge through the posterior nares. It was an aggravated case of hypertrophic rhinitis, with great swelling of the membrane covering the turbinated bones; this overgrown tissue was pressing against the septum. I made eight applications of the benzoin in this case at weekly intervals, with the result of great amelioration in the severity and occurrence of the headaches; her complexion was

cleared up, her countenance bright and full of vivacity, in fact, her appearance was so changed, that she looked like a different person. I do not consider this case entirely cured, although I have not treated her for the past three months, as I desired to see what nature will do in these cases if properly directed and without subsequent interference. The physician who referred this case to me has seen her recently, while attending other members of her family. She reports entire relief of the headaches and as enjoying splendid health; and her appearance is that of a perfectly well and extremely bright young woman.

CASE III.—Physician, age 54 years, who was affected in 1868 by a partial sunstroke; as he has been a personal friend of mine for many years I know perfectly the horrible sufferings which he endured from headaches recurring at frequent intervals, these headaches lasting usually from one to three days, affecting the eyesight, the frontal region and the occiput down to the base of the skull, sometimes on one side, sometimes on both. The whole materia medica was tried in this case, both homœopathic and old school, the gentleman being a graduate of the Jefferson Medical College of Philadelphia. These headaches were by far most violent and persistent on the right side, but usually began on the right and after one day passed to the left, and on the third day again returned to the right. They were frequently accompanied by scintillations of light and muscæ volitantes, by a sensation of a band around the cranium, and by a peculiar sensation of a pain resembling a dead weight at some particular point which was suddenly transferred to some other part of the cranium. It was impossible to believe in this case, from the sensations, that the brain itself was not seriously involved. In fact, some of these symptoms were unquestionably cephalic; there can be no doubt of that, but I now know and he knows, that they were reflected from the nasal branches of the ophthalmic nerve through the Gasserian ganglion. There was no particular catarrhal trouble in this case.* As I was at the time interested in these nasal phenomena, one evening while I was visiting him, I examined his nose, and found abnormalities to such a degree

* A headache very similar to this afflicted the late General Upton, of the United States Army, and the tortures were so great that they drove to suicide this extremely able officer.

that I had him call at my office and made a careful investigation. I found that while the membrane covering the middle turbinated on the left side barely touched the septum, that on the right side had developed to such an extent as to be fairly jammed and flattened against the septum.

I treated this case with cocaine, followed by chromic acid on the right side alone first, which developed the most painful subsequent symptoms that I ever met following this line of treatment; the pain was so great that cocaine almost failed to relieve it, the irritation extended to the tonsils, starting a genuine tonsillitis. I attributed, however, a great part of this subsequent suffering to his having contracted a severe cold the day following the treatment. The result in this case was almost miraculous, for two years afterwards the headaches were exceedingly few and slight, and, as a curious circumstance, now always began on the *left* side. I only made two applications of the chromic acid in this case, and the peculiar cephalic symptoms, that is, the genuine brain symptoms, have disappeared entirely, and the headaches are practically cured. As a marked concomitant, a very remarkable improvement in vision has occurred, and the intense eye symptoms are almost entirely removed.

I would like to call particular attention to the fact that in this case there was nothing to guide the investigation into the nasal orifices, since local symptoms were entirely absent, but as the gentleman had exhausted every available means in over twenty years' trial at curing this distressing malady, I felt sure there must be a cause somewhere and "hunted for it."

I make it a rule now whenever I meet a case of recurring headache, instead of first examining the eyes, to first examine the nose, and I would strongly urge this course upon the profession, because I have seen many cases in which the trouble was attributed to eye-strain and other like affections as the primary source, when in fact these symptoms were purely secondary and disappeared "like magic," as soon as the true source of nerve irritation was found, and removed, inside the nasal orifice.

I have used in other cases the electric cautery and various other modes of treatment recommended by the different authors with whom I am acquainted, but from my own practical

experience I prefer the use of chromic acid, or the compound tincture of benzoin.

In most cases very little secondary inflammation follows the use of chromic acid, as you know chromic acid is peculiar among caustics for the reason that it is self-limiting, the contact with organic membranes causing it to be decomposed so as to form an insoluble sesquioxide of chromium, which is deposited in the membrane itself.

I would like to urge most earnestly a further study of the phenomena which characterize the reflexes which have their origin in those parts of the body in which the skin is merged into mucous membrane, that is, the orifices of the body. No biologist who understands the mode of development of the living animal, can fail to see that it is right here that a line of functional division takes place, in which the nerve filaments are bunched instead of being distributed, and that the action of the reflexes is backward toward the nerve centres from these lines of division.

It is not because they are orifices merely, but it is because these are the areas which mark the grand division of peripheral nerve distribution, and in which the terminal filaments of two entire sets of nerve organisms are banked up against each other, instead of coalescing or crossing over into the opposite territory. Make no mistake; this is the true keynote to the philosophy of orificial surgery.

THE IMPORTANCE OF LABIAL HERPES IN THE DIFFERENTIAL DIAGNOSIS OF TUBERCULOUS AND PURULENT MENINGITIS.—Dr. Habel, though admitting that herpes labialis *is not the rule* in tuberculous meningitis, yet doubts the absolute certainty of this sign as a differential measure to distinguish it from the purulent variety, and cites a case in evidence where the necropsy revealed a tubercular meningitis. Out of sixty-five cases observed since 1884 he has found only one with herpes labialis. The literature presents only two more.—Seitz: *Die Meningitis Tuberculosa Bei Erwachsenen*, Berlin, 1874. *Hospitalstidende*, No. 47, 1896. [Dr. A. Kraemer, (*Die Meningitis Tuberculosa Adultorum*, pp. 144-145, 1894) refers to Seitz's cases, and although he did not observe it in his forty-four cases in adults, yet he admits the possibility of its appearance and doubts the absoluteness of its diagnostic value in distinguishing purulent meningitis.—F. H. P.]

EDITORIAL.

WM. H. BIGLER, A.M., M.D.

WM. W. VAN BAUN, M.D.

THE INJECTION OF NORMAL SALINE SOLUTION.

AMONGST the many "fads, fancies, and facts" which have been presented to the medical profession in the last few years, none seems to hold out greater promise of being able to escape the iconoclastic attacks of notoriety-seekers than the intravenous, subcutaneous, or intra-rectal injections of a normal salt solution or artificial serum. It seems to have come to stay and to be constantly enlarging its sphere of usefulness.

What is known of the physiological function of the sodium chloride is told in a few words. "It is found in all fluids of the body. It is found in blood and lymph to an extent of about 0.65 per cent. In the blood it acts as a solvent on serum-globulin and other proteids, and its inert presence in proper concentration (0.65 per cent.-physiological salt solution) affords a medium in which the functional activity of cells and tissues is maintained. Sodium chloride fed produces of itself alone an increase of water and of urea in the urine." (*Am. Text-Book of Physiology*, 1896). The solutions used in the injections made have varied from 0.65 per cent. to 0.73 per cent., the one ordinarily employed being a drachm of salt to a pint of boiled water, usually at a temperature of 100° F., although it has been injected at 104° F. to 106° F., and Professor Dawbarn, of New York, says that it may be used at a temperature of 110° F. It is claimed that the subcutaneous injection for hæmorrhage was done for the first time in 1886 in Leopold's clinic in Dresden.

The intravenous injection is theoretically the best because of its rapidity of action, but the procedure requires time and care, and hence in cases of emergency the solution can be injected subcutaneously or *per rectum* with equally good results.

Dennis, in his *System of Surgery*, says: "The injection into the veins of normal salt solution has proved by experiment and by clinical experience to be more efficacious in supplying volume to and restoring a rapidly failing circulation than human

blood." M. Mitour, of the Biological Society of France, replaced subcutaneous injections, which are sometimes badly borne, by intrarectal injections.

Used at first in cases of hæmorrhage and shock, the indications for its application have been continually increasing in number, so that at present, as we shall see, they cover a large and important portion of the therapeutic field.

It has been used with effect in post-partum hæmorrhage and placenta prævia, in hæmorrhage and shock resulting from injuries and operations and in intestinal hæmorrhages in the course of typhoid fever. It has also so counteracted the effects of shock that successful operations have been rendered possible. In a case of total suppression of urine, after the failure of all other remedies, the intravenous injection of the salt solution caused a copious secretion of urine in a few hours, and a cure followed. From the copious diuresis which invariably has followed its use we can think of many conditions in which it might be hopefully employed.

It has also been used in connection with simultaneous bleeding, in a process called by its originator, Dr. Henri Barre, "dis-intoxication of the blood." The aim is to combat the phenomena of general intoxication after other means have failed. Two india-rubber tubes are used, each terminating in a needle of a diameter a little greater than that of a Pravaz syringe. The longer of these tubes (about $1\frac{1}{2}$ meters) conducts into the vein of one arm the artificial serum from a graduated vessel at a position more or less elevated according to the amount of force deemed advisable. The second tube (1 meter long), the needle of which is inserted into a vein of the other arm, has its free end in a graduated vessel also, to receive the blood extracted. By this arrangement the circulatory system can be kept full and the arterial tension is not lessened, since as much serum can be allowed to flow in as is necessary to replace the blood abstracted. This quantity may vary between 500 grammes and 1 litre for an adult, according to the degree of intoxication. This differs from "washing the blood," in that the injection of the serum and the bleeding go on at the same time and a larger quantity of blood can be removed with the least danger to the patient. The exchange of liquids can be made very quickly (in thirty to fifty minutes), so that no sharp

reaction ensues, grave symptoms insensibly diminish, and gradually disappear, and are followed by refreshing sleep. Dr. Barre had applied this method in three cases, two of uremia and one of infectious pneumonia, and suggests that it would be applicable in eclampsia, diphtheria, capillary bronchitis, malignant icterus, general acute peritonitis, cerebro-spinal meningitis, typhoid fever, smallpox, scarlet fever, puerperal fever, cerebral complications of rheumatism and gout, poisoning by alkaloids, and, in short, wherever the danger from general intoxication equals or surpasses that from actual lesions of the organs.

Tuffier successfully applied intravenous injection in two cases of tetanus, after preliminary bleeding.

Chasserany found from experiment that voluminous injections (intravenous, intraperitoneal or subcutaneous) prevent the intoxication of rabbits by strychnine, provided they are made before the onset of the nervous symptoms.

Lewaschow reports fifty-two cases where he had substituted the salt solution for the effusion of pleurisy with marked relief and prompt recovery. As the effusion is gradually aspirated, it is replaced by the solution, which prevents the collapse of the organs into the empty pleura, and, while being gradually absorbed, exerts a general tonic and local antiseptic effect. It is being successfully used in the gynecological department of the Johns Hopkins Hospital for the relief of the thirst following abdominal operations. For subcutaneous injections the fold of the arm-pit, the retro-scapular region, the flanks, the buttocks, or outside of the thigh may be selected. The quantity injected will vary with the conditions. Lejar reports a case of a young man whose ruptured intestines he had sutured after peritonitis was fully established, who recovered after receiving 27 litres of the solution in intravenous injections.

In view of the success which has almost invariably attended the use of this simple remedy, it is a matter of wonder that it is not more generally employed. Probably its very simplicity is the greatest bar to its more general recognition as a remedy to be tried. It has none of the laborious mystery of the anti-toxins, the immunizing serums, and the restorative organ extracts. To those who delight to find human nature ever the same (and who may possess a Bible within reach) we recommend a perusal of II. Kings, v. 10-13.

THE SKELETON IN THE CLOSET.

THERE is a skeleton in every household, more or less effectually concealed from the unsympathetic gaze of the neighbors, and even from the questioning curiosity of the younger members of the family. The elders know of its existence, but speak seldom of it, and then only with bated breath. Occasionally one of them, more restless than the rest, may open the door of the closet, where it hangs in solitary majesty, and give to the startled youngsters a furtive glimpse of the grim occupant.

Such figure rose before our mind's eye while reading in the *Bulletin* of the American Academy of Medicine (October) a paper read before the Academy by Elmer Lee, A.M., M.D., Ph.B., of Chicago, on "The Confusion of the Materia Medica Relating to the Theory and Practice of Medicine."

To any reader of the journals of the so-called old school it will become evident that in the minds of their best men there is a growing dissatisfaction with their therapeutics—not with their powers of diagnosis, not with the action of their drugs nor with the doses, not with their auxiliary resources, but with the absolutely unguided and lawless mode of application of all of these. The want of a scientific system of therapeutics is the skeleton in their household. Strange as it may seem, that very puppet which they at times parade before the public decked out in the garb of "unsectarianism" and "true liberality," is the skeleton, that "grinning and ghastly and horrible thing" which taunts them at home with their blunders and wanderings and inane strivings. To the youngsters of their profession the "regular" practice is the only rational, liberal, scientific one (*sancta simplicitas*!); but for them—his words are "directed to confreres, not laymen"—Dr. Lee opens the closet door, and gives a glimpse of the skeleton. He says: "The profession has been going on for over three thousand years, studying the diseases of the body and experimenting to find out a system of therapy which is scientific. It is as far to-day from that perfection which is desired by all as it was one hundred years ago. There were those at that time who succeeded in both ameliorating and curing disease. Such persons are among us also to-day. But the great mass of physicians, as well as the great majority of patients, are controlled by a

system of therapeutic reasoning far from scientific. There will be exceptions to my view; but the exceptions will melt away upon sifting the actual facts of the case." In other words, many will try to clap to the door of the closet and say there is nothing in it; but the skeleton is there, as any one may see who has the courage to let in the light of truth and face its revelations.

The skeleton of the homœopathic school is, in our opinion, a craving for artificial food, predigested or otherwise—for a Nestle's gynæcology, a Mellin's pathology, a Horlick's anti-toxin. But we have at least a scientific system of therapeutics, the beauty and truth of which are not impaired at all by the unscientific manner in which it is often applied, nor by the faint-heartedness with which it is at times upheld.

We look forward to a time when it will be "discovered" by some great light of modern medicine, and adopted universally by the medical world, expressed, perhaps, in other terms, decked out in *quasi*-scientific language, but still the equivalent of our own simple *Similia Similibus Curantur*.

THE SITUATION AT ANN ARBOR.

The Homœopathic Medical College Bulletin, after all, does not seem to be the voice of the Michigan homœopathic profession, but rather the shrill piping of a regent's echo *via* the faculty, who can not be considered as altogether disinterested parties in retaining the school at Ann Arbor.

Out of 250 opinions recently received from the homœopathic physicians of Michigan, less than ten favored leaving the school at Ann Arbor as it is, and 95 per cent. opposed having the first two years at Ann Arbor and the last two at Detroit, as proposed by the regents, and 85 per cent. preferred to sever connection with the university if removal were impossible. So the vast majority of the people on the ground—the Michigan profession—feel that the chief stumbling-block to the revival of the Michigan school would be a permanent residence at Ann Arbor.

To the outsider three questions present themselves: First, Is the proposition of removal correct? Can a medical school be

better conducted in a large city like Detroit, or in a small village of 4000 people, like Ann Arbor? A medical school to reach its highest development must be in command of a vast amount of clinical material and in charge of a large faculty actively engaged in the practice of medicine and surgery in the immediate vicinity of its college and hospital. This is only possible in a community numbered by the hundred thousands. Second, Can the Ann Arbor school be successfully manned and maintained at Detroit? In answer to this, it is said a valuable site will be donated in the city of Detroit. The Grace Hospital will be at the services of the new faculty. The State will be asked to appropriate \$50,000 for building and equipment, and as a governing board the regents themselves have proposed a most admirable solution, to wit: A board of nine trustees to be named by the State Homœopathic Society and appointed by the governor, to manage under the regents. Last year the State expended about \$23,000 for five chairs in Ann Arbor, and it certainly could not do less with a full faculty at Detroit; so with 4000 to 6000 dollars added from fees of the enlarged classes would render \$30,000 available for the teaching department alone. The State of Michigan provides a one-sixth mill tax for the support of the university, which netted last year \$188,000. With a full faculty the homœopathic share would be considerable more than the \$23,000. So the means are certainly at hand, and there will be no difficulty in securing a strong teaching faculty from the brilliant group of men, numbering a hundred and more, located at Detroit.

With the fact clearly established that a large city is the only proper place to locate a medical college, and with a strong faculty at hand, together with the means necessary for building, equipment and maintenance, the only remaining question occurring to the disinterested member of the profession will be: Is this the opportune time to continue the effort for removal? Ninety-five per cent. of the active Michigan profession say yes, and they are the ones who know, and apparently they are right.

Last year the legislature of Michigan, after a long-continued agitation of the question of removal, by an almost unanimous majority, directed the regents of the University of Michigan to remove the homœopathic department from the campus at Ann

Arbor to the city of Detroit. This the regents refused to do, and appealed to the Supreme Court, and the decision was handed down that the legislature could not force the regents to carry out certain definite policies if the regents do not wish to do so; but the court carefully avoided saying that the homœopathic department could not be removed by the regents voluntarily. The same legislature is now in session, and is indignant at the affront offered to it by the regents; at the same time the regents are dependent for support upon the legislature. So it is now proposed to simply amend the amendment placed upon the one-sixth mill bill in 1893, by which the regents were compelled to continue the maintenance of the homœopathic college on the campus, by making the one-sixth mill appropriation dependent upon the voluntary removal of the homœopathic department to Detroit.

With the situation as it is, the question of removal should not be allowed to slumber. The best interests of the school demand its final settlement one way or the other, and if right does not prevail, the profession should start an independent school at Detroit in connection with the Grace Hospital, which is one of the largest and best-equipped hospitals in America.

The Michigan profession must be honest with itself and face the fact that the regents have proved themselves to be inimical to the homœopathic department. That they have but recently announced that the homœopathic department is still on "special appropriation," and that if the legislature withdrew its appropriation, the homœopathic department would cease to exist. With such sentiments expressed, the present is the appointed time to place the school upon a foundation of permanent success at Detroit.

SANGUINARIA IN MIGRAINE.—Barrow reports the case of a woman who for three years or more has had severe attacks of headache with nausea and vomiting. The attacks occurred every week and lasted about twenty-four hours. They began usually in the morning, increased in violence during the day, and are aggravated by motion, noise and light. Sleep gives relief, but cannot always be obtained. *Sanguinaria* 1x ter die was prescribed during an interval. The usual time for the attack passed over without anything more than a slight headache, and since then there has been no return, now over twelve months. —*Monthly Hom. Review*, December 1, 1896.

GLEANINGS.

RECENT CONTRIBUTIONS TO SKIAGRAPHY.—Dr. W. H. Peck, Chicago, reports a number of articles gleaned from various medical journals. One by E. E. King, in the *Canadian Practitioner* for November, 1896, describes an interesting case in which changes were produced in the skin, hair, and nails of an individual who was engaged in operating an apparatus for the production of the X-rays. In May last he began to give public exhibitions, and was exposed to the rays for an average period of two hours daily. In June his average exposure was six hours daily, with an occasional day in which it would reach as high as ten hours, with only momentary intervals. In July his exposure was about the same as in June. His right side was toward the coil. About the middle of July his right hand began to swell, felt stiff, and large blisters appeared on its dorsal aspect, accompanied by great pain. The face was not affected. He treated his hand with picric acid, which had the effect of rendering it less susceptible, as he continued the use of the apparatus for a while longer.

He then changed his occupation and for some months did not exhibit. The hand recovered, with no bad symptoms remaining. The last week of August he again began to exhibit, and was employed seven or eight hours daily. This time he placed his left side towards the instrument. In two weeks he began to notice his lips swelling, with a feeling of tension; his left cheek was swollen and seemed tender to touch. A few days later the left hand began to swell—was tender, discolored, and ached; in about ten days blisters formed, and the finger nails began to show signs of shedding. The eyelids were swollen; the conjunctiva was inflamed in both eyes, but the left was more severely affected. The face was inflamed over about two-thirds of its surface, but only in that portion which was exposed to the rays; it showed no tendency to blister, although the tension and erythema were quite painful.

The skin of both hands is now inflamed, smooth and almost hairless. All the nails are exfoliating. The left side of the face shows an entire absence of hair in the region of the temple and behind the ear. The eyebrows are almost gone.

The *British Medical Journal* of November 7th reports the case of a man exposed to the rays, to determine the presence of renal calculus. Exfoliation of the epidermis followed and a granulating surface was left like that following a severe burn. In commenting upon the cases, he says that many of the reports of dermatitis and injurious effect from the use of the Roentgen rays are mere coincidences.

He has skiagraphed a large number of cases, and over three thousand persons have looked through his fluoroscope, and in not a single instance has there been the slightest physiological or pathological effect produced.—*Medicine*, January, 1897.

W. D. CARTER, M.D.

THEOSINAMINE.—Dr. Sinclair Tousey, in a recent article in the *New York Medical Journal*, narrates his experience with this drug, which was first

brought to the attention of the profession by Hebra and Van Hoorn. The drug is made by mixing two parts of oil of black mustard seed, one part of absolute alcohol and seven parts of aqua ammonia of the specific gravity of 0.960, warming to 105° Fahr., and after a few hours evaporating over a water-bath. Theosinamine is deposited as the mixture cools. The drug is used hypodermically in a 15 per cent. alcoholic solution. In summing up the results of his experiments, Dr. Toucey believes the drug acts specifically upon certain abnormal tissues, causing their absorption. It is of great value in the removal of cicatricial contractions following lupus or any other cause of loss of substance. The frightful contractions of burns of the neck yield to its action, as do also cases of ectropion and corneal opacity. Dr. Toucey has used it with marked success in cases of keloid and also in malignant tumors.—*N. Y. Med. Times*, February, 1897.

COMPARATIVE EFFECTS OF DIFFERENT ALCOHOLIC DRINKS ON MEN.—According to the *Bull. Med.* (No. 19, 1896), Lanceraux has investigated the changes taking place in the nervous system due to abuse of different alcoholic drinks, wine, beer, absinthe, essences, etc.

In excessive use of alcoholic drinks of high percentage of alcohol, the tactile and thermal sensibilities do not seem to be greatly altered, while sensibility to pain seems exaggerated. In those that use absinthe and similar drinks to excess, the plantar reflexes are increased, light tickling causing movement, while slight stroking of the knees, legs, or abdomen causes pain severe enough to cause the patient to complain.

Similar results, although less marked, are to be observed in the upper extremities. In wine drinkers, this sensitiveness of the skin is much less in the lower extremities; above there may be a zone of hyperæsthesia, while still higher in the body normal skin sensation is the rule. Psychological symptoms by absinthe drinkers are stated to be fewer than is generally supposed and taught in the ordinary text-books. Wine and alcohol drinkers are prone to attacks of acute delirium, while in those that drink alcoholic essences, forms of dementia are more liable to follow.—*Am. Med. Surg. Bull.*, February 10, 1897.

THE SIGNIFICANCE OF HEART PAIN.—Taking consecutively a hundred cases of decided forms of heart disease under his immediate care, Dr. A. Ernest Sansom has found that in just half the number there was no complaint whatever of pain in any part of the chest. Seventeen referred the pain generally to the front of the chest, fifteen to the back, especially between the shoulders. Twelve suffered pain at the epigastrium, eleven suffered pains on the left side of the chest, while two referred their sufferings to the right side. Those who localized the pains to the exact area of the heart were but eight, and of these, two complained of it only after exertion. One described it as a sense of extreme soreness at the apex, whilst in another it partook of the character of neuralgia about the left breast. Only 8 per cent. complained of pain directly referred to the situation of the organ diseased.—*N. Y. Med. Times*, February, 1897.

F. MORTIMER LAWRENCE, M.D.

OPERATIONS FOR FACIAL NEURALGIA.—Dr. Louis McLane Tiffany says that with our present knowledge it is not always possible to say what case will require a central operation, but the following suggestions will assist the sur-

geon in deciding : 1. Intracranial operation is to be thought of—(a) if more than one branch is affected ; (b) if the painful area receives filaments from the branches near their exit from the head, *e.g.*, tongue, temporal region ; (c) if the pain is not the expression of a constitutional disease ; (d) if a cause central to the ganglion does not exist ; (e) if other measures have failed to relieve. 2. The intracranial operation for the cure of facial neuralgia, which should be done, is removal of the lower two-thirds of the ganglion of Gasser, together with the second and third branches as far as their foramina of exit from the skull, all in one piece, so as to be certain of the amount of tissue taken away. 3. The upper third of the ganglion and first branch may, for the present at least, not be excised for neuralgia. 4. It may confidently be expected that the present large mortality will be greatly diminished by the adoption of an improved technique joined to increased experience.—*Annals of Surgery*.

LOCOMOTOR ATAXIA.—The value of the discovery of Motschukowsky in the treatment of locomotor ataxia will not be appreciated to its full extent by the profession at large until permanent suspension by means of the extension corset has replaced temporary suspension.—*Medical Record*, January 23, 1897.

HOW TO STOP THE INFLAMMATION FROM VACCINATION WHEN RUNNING TO EXCESS.—Clement Lucas suggests that should the vaccination pustules on the twelfth or fourteenth day tend to become confluent, whilst the inflammatory areola tends to spread beyond the usual limits, the glands in the axilla to enlarge, and the arm, perhaps, to become œdematous, then the area of the pustules should be powdered over with iodoform, and a sterilized dry pad be applied over to keep the powder in position and the pustules from friction. In this way the process is completely checked in twenty-four hours. The pustules dry into a cake, the redness subsides, the glands decrease and the œdema of the arm rapidly disappears.—*British Medical Journal*, January 30, 1897.
CLARENCE BARTLETT, M.D.

TUBERCULOSIS OCCULATA.—Dr. Briault thinks that preceding writers have placed the figures too high for the percentage of those who apparently dying from violence or another disease, and were they revealed by the necropsy to be tuberculous. Brouardel states this to be 60 to the 100, and an Italian physician, Pizzini, 32 per cent. Out of 10 cases he only obtained positive results in 1 by inoculation of a liquid derived from trituration of the bronchial glands with water.—*Revista Medica de Sevilla*, Tomo, xxvii., No. 6. [See the abstract of Prof. Maragliano's article on "Masked and Latent Forms of Tuberculosis" in the HAHNEMANNIAN MONTHLY, December, 1896.—F. H. P.]

HYSTERIC GASTRALGIA.—Dr. Sticker has observed 5 cases of a form of gastralgia which he holds to be of a hysteric character. The patients were all pronounced (female) hysterics, and in all was the region of the stomach so very sensitive to pressure that he was able to outline that organ by palpation. Not by indirect pressure was that organ sensitive, nor was there the dull and distressing pain of peptic ulcer, but it was a violent pain, so severe as to accelerate the respiration and the pulse and even to narrow the pupil. Chronic catarrh and cancer do not present this exquisite general sensitiveness to pressure, though some cases of acute gastric catarrh might simulate. He ascribes this to a hysteric hyperæsthesia similar to the cutaneous over-sensitiveness. In one of the cases there was an analogous sensitiveness of the liver, and in a

male hysteric of 28 years such a condition of the bladder.—*Hospitalstidende*, No. 30, 1896.
FRANK K. PRITCHARD, M.D.

METATARSAL NEURALGIA, OR MORTON'S DISEASE.—Tubby (London) writes in *The Lancet* concerning the above, and states that Morton, Philadelphia, in 1876, first described this affection under the title of a "Peculiar Painful Affection of the Fourth Metatarso-Phalangeal Articulation." Since that date it has been variously called "metatarsal neuralgia," "metatarsalgia" and "anterior metatarsalgia." Morton's description in the main holds good, but an examination of cases shows that the affection is not limited to the fourth metatarso-phalangeal articulation, it being found to occur quite as frequently about the head of the third metatarsal bone and less often about the head of the second, so that the condition may be described as neuralgia situated in the anterior part of the foot.

Ætiology.—The rheumatic or gouty diathesis is marked in many cases, but its onset is determined by a blow or strain. In some cases, however, it is brought about by long standing and walking, especially in narrow boots; occasionally some degree of flatfoot is present. In fact, the disease is a condition of painful flattening of the transverse arch at the heads of the metatarsal bones.

Symptoms.—1. Pain. The attention of the surgeon is first drawn by the patient to the pain which he suffers in the anterior part of the foot. It is not, however, entirely confined to the foot, but, starting about the head of the third or fourth metatarsal bone, is reflected up the limb. Frequently it is intense and paroxysmal and renders locomotion impossible in the latter part of the day. Usually no redness is present, but sometimes considerable congestion appears from time to time. Whilst at rest the patient suffers little or no inconvenience, and can start on a walk without any discomfort. In a short time the pain commences and the feet feel hot. These symptoms are much exaggerated on going into a warm room. Relief can only be obtained by removing the boot and grasping the instep firmly.

2. Deep tenderness is present about the head of the third or fourth metatarsal bone.

3. The affected foot is broader across the heads of the metatarsal bones than is normal, *i.e.*, there is obliteration of the anterior transverse arch of the foot.

4. On examining the sole a large corn may often be seen beneath the heads of the third or fourth metatarsal bones, which are felt to be prominent in this situation. The character of the pain, the presence of a corn under the heads of the third or fourth metatarsal bones and the prominence of either of them as felt from the sole are diagnostic of the disease.

5. A peculiar twist is present in the foot. It is found to be twisted inwards in front of the tarso-metatarsal articulation, so that the base of the fifth metatarsal bone is displaced outwards, and being pressed on by the boot often becomes tender and has thickened skin over it.

6. The impression of the foot is typical. There is a bulging instead of a re-entering angle behind the ball of the great toe.

Pathology.—After detailing several cases, Tubby continues by stating that the pain is undoubtedly due to pressure on the digital nerves in the interspaces between the displaced metatarsal bone and its neighbors. Morton, in

writing of the affection, when situated about the head of the fourth metatarsal bone, gives the following explanation :

The heads of the first three metatarsal bones are nearly in a line and less movable than the remaining ones. The head of the fourth is one-quarter of an inch behind that of the third, while that of the fifth is nearly half an inch behind that of the fourth. The fourth and fifth metatarsal bones at their anterior extremities are very mobile. When the transverse arch is compressed the head of the fifth metatarsal bone and its proximal phalanx come directly into contact with the head and neck of the fourth, and consequently the digital nerves are compressed.

Whilst this anatomical explanation suffices in the case of the fourth and fifth metatarsals, it fails to explain metatarsalgia beginning around the heads of the second and third bones. In such instances the explanation appears to be as follows :

When the transverse arch gives way anteriorly the third, and to a less degree the second metatarsal heads come more closely in contact with the ground than the others. As a result partly of the hereditary rheumatoid tendency and partly from its unusual pressure on the ground, the head of the third enlarges, owing to the formation of osteophytes. Now, if tight boots are worn the digital nerves in the second and third interspaces are pressed against the enlarged head of the third metatarsal bone.

Prognosis.—Should be guarded in all cases ; even with complete rest the acute pain diminishes slowly for a few days, and for weeks afterward exacerbations may take place when the patient walks.

Treatment.—In all cases, if evidences of rheumatoid arthritis or gout are forthcoming, these diseases should be treated by the usual but frequently inefficacious constitutional remedies. The attacks of acute pain can be relieved by removing the boot and soaking the foot in hot water. For the foot, the first thing is complete rest for two or three weeks. Gibney has noticed that if the bases of the metatarsal bones are compressed the heads are separated. A boot should therefore be made to fit closely over the instep, and of sufficient breadth in the tread to give plenty of room for the heads of the metatarsal bones. The soles must also be thick. As an adjunct a rubber bandage or a leather band may be placed firmly around the bases of the metatarsal bones so as to separate the heads as much as possible. If the pain is not relieved by the above treatment excision of the head of one of the metatarsal bones is necessary, and that one should be removed which has the largest corn over it.

HERBERT L. NORTHROP, M.D.

A CASE OF ARSENIC POISONING ORIGINATING IN THE VAGINA (*Haberda*).—A servant girl, 25 years old, was taken sick and brought into the hospital. She entered almost pulseless, showed sensitiveness of the abdomen on pressure and complained of constipation. An enema was given and followed by a formed stool and then bloody slime. Peritonitis originating in the genitals was diagnosed, but an examination of the genitals was not made, as the patient stated she had just begun to menstruate. The heart weakness increased and she died on the third day. The autopsy showed acute fatty degeneration of the organs and hæmorrhages, which raised a suspicion of phosphorus poisoning, and the body was turned over to the medical examiner.

Besides icterus there were isolated hæmorrhages in the subcutaneous cellular tissues and in the muscles, fatty degeneration of the heart, of the liver

and the kidneys, cloudy swelling of the mucous membrane of the stomach and enteritic alterations, such as are especially peculiar to arsenical poisoning. There was also an acute splenic tumor and fibrinous pelvic peritonitis in the cul-de-sac of Douglas. The diagnosis of arsenical poisoning was first made after the removal of the genitalia. There was found in the rectum, a hand-breadth above the anus, a place the size of a half-dollar in which the rectal mucous membrane was hæmorrhagically infiltrated and superficially necrotic in places. The mucous membrane of the bladder was pale. There was great œdema on the labia majora, numerous blisters dried down and extensive intertrigo on the surrounding skin. The vagina was closed by thick fibrinous exudation; the uterus was small and empty. At the right of the vaginal vault near the cervix uteri, in a mass of membranous exudation, was found a paper which contained crystals of arsenic. The vaginal mucous membrane was intensely inflamed, its folds erect and the recto-vaginal septum extremely infiltrated, corresponding to the spot described above. The smaller labia showed an abundance of fresh croupous exudate. There are but few analogous cases in literature. Mangar mentions that a peasant in the previous century in Finland poisoned his three wives by introducing arsenic into the vagina after coitus. A case occurred later in 1799 in which a woman was poisoned by her husband in like manner. Britten (1864) mentions a case of a young woman who became pregnant and tried everything to expel the fœtus. She, too, introduced arsenic into the vagina and died three weeks later. A case is reported in Russia, in 1890, in which a prostitute was poisoned by a man who forced arsenic into the vagina; the woman died in eight days, and at the autopsy there was found in the vagina a wad of horse-hair containing a quantity of arsenic crystals. The present case was apparently one of suicide.—*Centralblatt für Gynäkologie*, No. 50, 1896.

THE TREATMENT OF THE VOMITING OF PREGNANCY BY OREXICUM BASICUM (*Rech*).—A case four months pregnant had been treated in vain by various methods without success. The patient had become very much reduced and had a pulse of 132. The induction of abortion was about to be performed when Dr. Rech found in No. 16 of the *Centralblatt für Gynäkologie*, 1893, a short communication from Froumel in which he reported four cases successfully treated by orexicum basicum. He prescribed it at once in doses of 0.39 in capsules three times a day. The first two powders were vomited up in a few hours, but the vomiting ceased entirely after the third powder. The remedy was continued three days; the patient recovered rapidly and had no more vomiting during pregnancy. Martius and Parenski advise caution in using the drug.—*Centralblatt für Gynäkologie*, No. 33, 1896.

GEORGE R. SOUTHWICK, M.D.

VISUAL DISTURBANCES DUE TO NERVOUS DISEASES.—In a paper before the New York Academy of Medicine, Dr. W. A. Holden said that in ordinary simple optic atrophy there was a gradual failure of central acuteness of vision and peripheric contraction of the visual field. Such optic atrophy was due usually to some degenerative nervous disease, such as tabes or dementia. In the pure form of central scotoma there was a diminished perception of red and green in the centre of the field, while the blue is recognized. The visual disturbance in hysteria resembled that found in neuritis of the optic nerve. There was usually slight disturbance of vision for distant objects, and more marked disturbance for near objects. There might be a reversal of the order

of the color fields. Pressure on the chiasm, in front or behind, as well as above or below, near the median line, affects only the crossing fibres which are distributed to the nasal halves of each retina, and receive impressions from the temporal halves of each field. Chiasm affections might, therefore, give rise to a variety of visual affections, all corresponding to the type of bi-temporal hemiopia.

Dr. H. Knapp, in discussion, said that there were cases of optic neuritis with total blindness for several months, and yet vision might be restored in one eye and last for many years. The optic atrophy from tabes was permanent. He had never seen, in his large experience with amblyopia from alcohol and tobacco and quinine, a case of total blindness from these causes. Quinine blindness would preserve the centre of the visual field, while this portion of the visual field would be affected in alcohol and tobacco blindness. In quinine blindness, if the peripheric field were much affected, vision here would never return. One prominent symptom of alcohol and tobacco blindness which had been long known, was that the vision was better at night than during the day. Another symptom was premature presbyopia, due to a paralysis of accommodation. Such people often required glasses five or ten years earlier than would be ordinarily warranted by their refraction. He had invariably noticed that those who suffer from tobacco blindness to any marked degree had begun smoking tobacco early—before twenty years of age. After this age tobacco was very much less injurious. A case had been reported where the eye had been affected by an unusual poison—coal gas. In this case there was transient atrophy of the optic nerves, and paralysis of the external muscles of the eye. This case had occurred fifteen years ago, and although the man's optic nerves were still pale, his sight had remained quite good.

Dr. Joseph Collins referred to a case of tumor of the aqueduct of Sylvius, which produced a high degree of optic neuritis. There were no coarse defects of vision until a few days before the man's death.

Dr. Thomas R. Pooley said that eighty-three poisons had been tabulated as affecting the eye, and hence we had reason to thank Dr. Claiborne for his concise and practical paper. He was of the opinion that there was a more distinct neuritis in the amblyopia of alcohol and tobacco than was observed in other forms of retrolbulbar neuritis. In regard to the ætiology of tobacco amaurosis, the nicotine poisoning was the important factor. He had also noted that people who began smoking quite early in life were more apt to be affected by nicotine poisoning. Another fact, showing that nicotine is the important element, was that those who smoke strong tobacco in dirty pipes suffer the most. Where the pipes are kept clean this does not hold. Those who are accustomed to chew the "butt" and tobacco-chewers, are liable to tobacco amaurosis. He could not accept the statement that in quinine poisoning there was usually amaurosis. He had usually observed considerable amblyopia, but not amaurosis, with a decidedly small field of vision. In this field of vision, however, the sight was good. He was very skeptical regarding cases of arsenical poisoning. Regarding the effect of opium poisoning, he said that this drug had a peculiar effect on the extrinsic muscles of the eye—a very marked diminution in the amplitude of accommodation, and also a very marked esophoria being produced. These, and also the presence of nystagmus, he had noticed in opium *habitués*. Every case of septic iridochoroiditis that he had seen had gone on to phthisis of the globe and loss of sight.—*Amer. Med.-Surg. Bulletin*, November 14, 1896.

MONTHLY RETROSPECT

OF HOMŒOPATHIC MATERIA MEDICA AND
THERAPEUTICS.HÆMATURIA FROM RENAL DISEASE CURED BY *THLAPSI BURSA PASTORIS*.

—Cash records the case of a worn, emaciated man of 63 years who had been ailing a long time. There were pains about kidneys, he was passing large uric acid crystals, also pus and a good deal of blood; this was sometimes bright, but often of a dark color. Bleeding was always increased by the least movement. His bladder had been sounded, but no stone could be detected.

Arnica, *millefolium*, *hamamelis* and *terebinth* had been tried, but with little if any result. Finally two drops of the mother tincture of *shepherd's purse* were given every two hours. In five days the blood was markedly and strikingly less. Patient was able to return home, a distance of four miles by train, which he accomplished "without any aggravation to speak of." The bleeding was checked after it had been on him for twenty-two days. He wrote three months later saying that there had been only one return of the bleeding since, and then he had a short attack which was brought on after riding over some cobble-stones one day when out in his bath chair.—*Monthly Hom. Review*, December 1, 1896.

A NEW CLINICAL SYMPTOM OF PETROLEUM CONFIRMED.—In a communication to the Massachusetts Homœopathic Medical Society, Payne, of Boston, says:

"It has been my good fortune to be able to verify a symptom of petroleum first brought to your notice by me some time ago in a paper presented to this Society. In this case an entire loss of the eyelashes (*iradareosis*) from infancy was rectified, and a new and healthy growth re-established under the action of petroleum given internally, when the external application of the same remedy in its crude form had utterly failed to accomplish beneficial results; and the principal symptom that called for its exhibition, and the one on which I based my prescription, was a sensation on the skin of the face and lids of dryness and constriction, as though it were covered with a thin layer of albumin. The case that I have to report to-day had also this same symptom and nothing else definitely in the way of subjective symptoms, and it was cured by petroleum, selected because of this peculiarity.

"Mrs. A. H. C.; aged 45; was admitted to the Massachusetts Homœopathic Hospital in June, 1894, suffering from chronic recurrent iritis and from ectropium (eversion of the lower lids due to a granular state of the mucous membrane (the conjunctiva), a condition known as trachoma. She suffered great distress each night from dull, heavy pains in her eyes, which appeared very much flushed in the ciliary region, with the characteristic pink zone around the edge of the cornea, a symptom so indicative of iritis, and

with contracted and inactive pupils and photophobia. Her lower lids were completely everted, so that the lining mucous membrane was much exposed. This was of a dull, dead, pale-pink color, and covered with transparent elevations the size of an ordinary pinhead, and almost bloodless in appearance. The cheeks beneath appeared glazed and contracted. There was no discharge from the eyes, except an occasional lachrymation from the pain of the iritis. Questioning could elicit no history of importance, except that she had had the symptoms of iritis off and on for many months, and the eversion of the lids for a much longer period, and had adopted various methods of treatment without benefit. The only definite subjective symptom on which to base a homœopathic prescription was this one which I have referred to, namely, a sensation of dryness of the skin, as though glazed by a thin layer of albumin. Petroleum was prescribed with the result of a complete and rapid subsidence of the symptoms, a disappearance of the pain and of the flushing of the iris, and a restoration of the lids to their normal position and appearance, and simultaneously a subsidence of the guiding symptom that I have referred to on which the prescription was based. I have heard from the patient several months later, and have learned that she still continued well. The rapid subsidence of the symptoms following the use of petroleum seems to leave no doubt as to the beneficial influence of the remedy, for the case had already dragged out a weary existence of several months, and was characteristic of that most stubborn of all diseases, chronic trachoma, with the additional incubus of recurrent iritis."—*N. E. Med. Gazette*, January, 1897.

BRYONIA ALBA IN AURAL VERTIGO.—Wright, of London, states that for the relief of Ménière's symptoms dependent upon a catarrhal condition, whether simple or sclerotic, of the middle ear, he knows of no drug which is so generally useful as this one. Even in cases of suppuration this remedy, together with any other, such as hepar sulph. or silicea, which may be indicated by the suppurative condition, usually acts efficiently. He is convinced, however, that it is not without an action on the labyrinth, for he has seen it act well in cases of sclerotic catarrh with secondary labyrinthine trouble of high degree. It especially suits those cases in which vertigo comes on when sudden movements, such as getting up from a seat, etc., are made, combined with the presence of the characteristic digestive symptoms of bryonia.

He reported a case some time ago in which this remedy alone cured a long-standing vertigo. It was reported as an example of true Ménière's disease, but though the concomitant symptoms pointed to a labyrinthine involvement, further consideration has convinced him that the repeated attacks of vertigo were brought about by some sympathetic disturbance. The chief fact pointing to this was the flow of viscid saliva which occurred immediately before the attack, and which reminds one of the thick, sticky saliva experimentally produced by stimulating the cervical sympathetic, contrasting with the thin, watery flow on chorda stimulation. It is, therefore, probable that in this case the vertigo was due to sudden vaso constriction producing anæmia of the labyrinth, an assumption which receives some confirmation from the fact that on one occasion a dose of glonoine gave immediate relief, though it should be mentioned that the effect was not repeated.—*N. E. Med. Gazette*, January, 1897.

F. MORTIMER LAWRENCE, M.D.

THE HAHNEMANNIAN MONTHLY.

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THE RELATIONSHIP BETWEEN ASTHMA AND BRONCHITIS AND DISTURBANCES OF THE DIGESTIVE SYSTEM.

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IN looking over the literature of asthma one is struck by the many failures which have been recorded, or at least have been tacitly acknowledged in text-books, concerning its treatment. Two causes may be assigned for this result:

First, That there is no specific for asthma; *second*, That its true nature and ætiology have not been in many cases clearly understood. The theory that asthma is always caused by a spasmodic contraction of the circular muscular fibres which exist in the finest bronchial tubes was for a long time accepted as a fact, and what seemed to confirm this idea was that the neurotic temperament which is characteristic of asthmatic subjects was apparently manifested by these muscular spasms. Bosworth, who followed some years ago Webber's theory concerning this disease, asks these questions:

First, If the paroxysm is due to muscular spasm, why should the attack, in most instances, occur at night? *Second*, Why

should it be affected by changes of temperature? *Third*, Why should relief be obtained by high altitudes? *Fourth*, Why should an attack be aggravated by a damp atmosphere?

In answer to these he says:

First, In sleep there is everything which should protect one from an attack of asthma, and yet a paroxysm almost invariably comes on at night.

Second, Changes of temperature are not recognized as having any marked effect on the nervous system, and yet a change of climate not unfrequently precipitates an attack of asthma.

Third, The seashore, rather than mountainous districts, is favorable to the toning up of the nervous system, and therefore asthmatics should suffer least at the seashore on this theory than the converse is true.

Fourth, That the paroxysm is ushered in suddenly, and that during its persistence it is characterized by symptoms which are easily explained upon the theory of spasmodic muscular contraction of circular fibres of bronchial tubes, but the *culmination* of the attack is invariably marked by a more or less profuse sero-mucous exudation with cough and expectoration. Bosworth, quite rightly, thinks that this does not harmonize with the spasmodic theory, and that, in all probability, the old theory will have to be abandoned on the ground that it fails to explain the clinical history of asthma or of its paroxysms. If we cast this idea aside what other view can we find that will explain to us in a satisfactory way all the special points mentioned above? There are two theories advanced, one by Webber and one by Haig.

Webber, who has devoted considerable time to the subject, came several years ago to the following conclusions: That an asthmatic paroxysm is due not to muscular spasm, but to a paralysis of the vaso-motor nerves regulating the calibre of the blood-vessels of the bronchial mucous membrane. When a vaso-motor paralysis comes on suddenly, the blood-vessels in the bronchial mucous membrane assume a sudden turgescence, from which the membrane becomes markedly swollen and congested, thereby encroaching upon the calibre of the bronchial tubes, constituting really the first or dry stage of inflammation. The membrane is swollen, dry and does not secrete. The result of this swelling is to interfere not only with the *entrance* of

air to the air-cells, but also to its *escape*, causing dyspnoea both in inspiration and in expiration. This condition, persisting for a certain time, suddenly gives away with a profuse exosmosis of serum and ends the attack. Webber's theory is certainly more in harmony with the clinical history of asthma as well as with the clinical history of its paroxysms, and it does not deny the neurotic element. And now what facts can be brought forward to support this view? In answering this, I shall dwell a few moments upon the exciting causes which are capable of producing a paroxysm, and then upon the conditions which must be present to assist in bringing about an attack.

First, We must recognize those cases in which the attack is excited by direct irritation of inhalations, such as smoke, ipecacuanha powder, emanations from certain animals, etc.

Second, Cases in which the reflex nature is very marked. Under this head come attacks resulting from constipation, uterine irritation and violent mental emotions.

Third, Asthma occurs often as a complication of bronchitis, heart disease and emphysema, and is usually brought on by fatigue or physical exertion.

Fourth, Then, as in many cases recently treated, a diseased condition of the nasal mucous membrane has been found. The true nature of this being an obstructive lesion, which gives rise to vaso-motor weakness of the bronchial mucous membrane through the intimate sympathy between the two regions—nose and bronchial tubes. In the case of polypi, located in the middle or posterior part of the nasal cavity, accompanied by asthma, in addition to the symptoms occasioned by the growths themselves, we may consider the process by which an asthmatic paroxysm is brought about to be as follows: The polypi swelling up on approach of damp weather or in some cases without this occurring, irritate the sensory nerve filaments connected with the sphenopalatine ganglion. From this the impression travels to the carotid plexus, which is closely connected with the posterior pulmonary plexus, formed not only by the branches of the sympathetic, but also by some from the pneumogastric, and finally to the ramifications of the air-tubes through the sympathetic filaments to the bronchial mucous membrane. The first effect upon the nasal and bronchial vessels being contraction followed by dilatation, the venous sinuses or corpora

cavernosa becoming filled with venous blood and remaining distended; the bronchial vessels remaining dilated, the lumen of the bronchia is narrowed and dyspnoea results. In one of my cases pushing a polypus itself against the nasal mucous membrane or pressing with the point of a probe against the same surface produced a marked increase in the difficulty of respiration. In another case, which is an example of reflex asthma caused by severe shock to the cerebro-spinal nervous system and through the sympathetic nervous system to vasomotor disturbance of the bronchial vessels, the patient, a young girl, aged seventeen years, was perfectly well, and while walking in the street she slipped and fell violently upon the icy pavement. She developed a few minutes later an attack of asthma that lasted four days.

Fifth, Finally, some as yet unknown condition, atmospheric in its nature, is a factor in precipitating a paroxysm.

It only requires a thought—hardly any deep meditation—to realize that, while Webber's theory seems to explain many of the cases of asthma with which we meet in our daily practice, yet it also leaves many questions concerning its true nature and symptoms unanswered. For instance, how about those cases of asthma which do not possess noses full of pathological specimens? Asthmatics that are not victims of rectal or uterine disturbances? People that are not indulging in persistent inhalations of irritating powders? And, finally, that class of patients, who, like the many mental arithmetic problems that appear to the student as without a solution, simply have asthma, and any amount of careful research for a cause leaves us still in the dark. It was in all probability the appreciation of this state of affairs that prompted Dr. Alexander Haig, of London, to work up, day by day, as he gained fresh facts of importance to him, the theory that is, by all means, the latest and most elaborate at the present time.* He maintains:

I.—“That asthma, while resembling migraine, epilepsy and Raynaud's disease, is paroxysmal, and is also, like those diseases, paroxysmal in relation to the excretion of uric acid, and the amount of that substance which passes through the blood.

II.—“That as excess of uric acid in the blood contracts the

* *International Clinics*, vol. iv., series 3.

arterioles all over the body and produces high arterial tension, and further, as there is some reason to think that migraine and epilepsy represent the effects of high arterial tension on the circulation of the brain, while Raynaud's disease represents the effects of contracted arterioles on the nutrition of the skin, we found ourselves asking the question whether asthma might not represent the effect on the thoracic circulation of the contraction of arterioles and high arterial tension similarly produced."

Haig points out, in favor of this supposition, that uric acid, which by its effects on the renal arterioles regulates from day to day, and from hour to hour, the amount of water that shall be passed in the urine, regulates also, within certain limits imposed by physical laws, the amount of water given off in the air expired from the lungs. In order to understand the causation of asthma from this standpoint, it is necessary to remember two facts relating to the physics and physiology of the thorax:

I.—"That there are two circulations within the chest (*a*), that of the pulmonary artery, in which there is comparatively low pressure, and (*b*) that of the bronchial arteries, which come from the systemic circulation, in which there is a much higher pressure.

II.—"These circulations are enclosed in a cavity in which the pressure varies every moment with respiration. According to Marey, if the atmospheric pressure on any vascular area of the body be diminished its capillary vessels at once dilate, and it is obvious that most blood will stream into that area which has the highest arterial tension behind it, because it is the pressure in the arteries which drives the blood through the capillaries into the veins" (Marey*). Hence, if the atmospheric pressure is lessened in the thoracic cavity the bronchial circulation will be more congested than the pulmonary. If the tension in the systemic arteries is high, the area supplied by the bronchial arteries will be proportionately congested. Therefore, there is a tendency to hyperæmia and congestion in the lungs, which is most pronounced in the region to which the bronchial arteries are distributed, and which will be increased with rising arterial tension or by anything which obstructs the free entry of air to

* *La Circulation du Sang*, 1881.

the chest, and so diminishes more than usually the atmospheric pressure during inspiration."

Marey is inclined to take the view that the ease with which the lungs become congested or inflamed may be attributed to the diminished pressure in which they have to work.* Haig says: "It seems to me that such a congestion or hyperæmia affecting especially the bronchial circulation may quite account for the retro-sternal pain with slight increase of bronchial secretion and wheezing which I have myself experienced in connection with excess of uric acid in the blood, and the high arterial tension it produces; and a slight increase of this disturbance may easily account for the bronchial congestion of asthma. Do not we here get a ray of light on the causation of chronic bronchitis, and on its frequent association with chronic Bright's disease and high arterial tension in the declining years of life?" It is easily understood that once a certain amount of bronchial hyperæmia exists, the mucous membrane becomes swollen, and by obstructing the free entrance of air to the bronchi and alveoli, causes a diminished pressure in the distal air passages, and hence increased hyperæmia and congestion. This makes the difficulty in respiration worse until a copious secretion of mucus occurs. Uric acid then, if present in the blood in large quantities and constituting uric acidæmia, gives rise to high arterial tension in the area supplied by the bronchial arteries. If the resulting hyperæmia or congestion is slight and chronic, we may have an explanation of cases of chronic bronchitis; if more sudden and severe in its nature, we have an attack of asthma. If asthma is caused in this way it ought to be aggravated by anything that contracts the systemic arterioles and raises the arterial tension, and it should be ameliorated by anything that produces relaxation of the arterioles, and hence diminishes arterial tension. Anything that prevents the free entrance of air to the chest should also increase the asthmatic symptoms. Asthmatic paroxysms are always worse in the early hours of the morning because the largest excretion of uric acid in the twenty-four hours occurs at that time, and in passing through the blood occasions a high arterial tension. During sleep the patient is usually in the recumbent posture, which of

* *Loc. cit.*

itself increases arterial tension when compared with standing or sitting, so that asthmatics often sleep in a chair, but cannot do so in bed.* To sum up this view of Haig, we may state that asthma is probably produced in this way:

(a) Either an acute attack of indigestion, bad air with deficient oxygen, fear or shock, certain odors which produce nausea, excessive heat, etc., are capable of causing increased *alkalinity of the blood*.

(b) With increase of the alkalinity of the blood there is the tendency by it to take up all of the uric acid within its reach.

(c) This sudden accumulation of uric acid in the blood increases the arterial tension, the result of which is to precipitate an attack of bronchitis or a paroxysm of asthma, as explained above.

(d) Where nasal irritation and obstruction exist with asthma there is probably only the relationship that the free entrance of air in inspiration is interfered with; the natural tendency of this is to diminish the atmospheric pressure in the thorax and increase the congestion in the bronchial area, provided the arterial tension remains sufficiently high.

(e) Finally, the drugs most widely used in the treatment of asthma (by the old school) are probably the iodide of potash and other iodides: which are well known to relax the arterioles and lower arterial tension by clearing the blood of uric acid. Also, that the fall of arterial tension and diuresis thus produced are synchronous with a marked fall in the excretion of uric acid. At this point we find ourselves confronted with the question, "What is the real source, method of production and nature of uric acid?" And it is necessary that we look into these points if we are to reach any definite conclusions concerning the theories above reviewed. The latest researches into the uric acid diathesis by Horbaczewski and Roberts have altered considerably the ideas commonly held upon this subject.† Uric acid is one of the normal constituents of the urine, and there are no facts which tend, in the least, to support the oft-repeated statement that it is formed *only* in the kidneys. It is not possible to prove its presence in the blood of healthy persons, simply because the human subject naturally refuses to

* Marey, *loc. cit.*

† Shrady, *Medical Record*, April, 1895.

shed his blood in sufficient quantities for an accurate analysis which cannot, with our present methods, be made with a minute amount. Uric acid, xanthin and hypoxanthin can be prepared from spleen pulp, and the constituents of this organ, which can be decomposed into xanthin bases or uric acid, is the nuclein of its lymphatics. Outside the body uric acid may be prepared from any of the tissues. Haig says: "All animal tissues contain some small percentage of uric acid, and there is every reason to believe that when the tissue is eaten and digested this uric acid is absorbed into the blood, and remains either in the body or is excreted in the urine, according to the condition of the blood at the time it gets into it: if the blood is very alkaline, or otherwise in condition to hold urates in solution, they will probably remain in it until the kidneys have time to excrete them; if, on the other hand, the blood is but slightly alkaline, or otherwise unable to hold urates in solution, they are deposited or held back in the liver, spleen or other tissues, and remain but a short time in the blood, though they may come back to it later on. Then many animal tissues contain other members of the xanthin group, and the metabolism of the body appears to make short work of slight chemical distinctions, promptly converting them into uric acid, and caffein and other vegetable alkaloids are so closely related to the xanthin group that for all practical purposes they may be reckoned as uric acid, and their introduction into the body increases the excretion of uric acid to a corresponding extent."

If nuclein is taken as food or injected hypodermically, uric acid is increased. It is very probable, from the researches of Horbaczewski, that uric acid is produced in the healthy person by the decomposition or breaking down of nuclein, which is found in varying amounts in all the tissues. It is a curious fact that the quantity of uric acid bears a close relationship to the number of white blood corpuscles, as exemplified by cases in which there are formed and destroyed large numbers of those corpuscles, as anæmia, leucocythæmia, pneumonia, carcinoma and very severe burns. In such morbid conditions we find uric acid increased in amount. Exercise invariably causes a greater production of it, and carbon monoxide, pilocarpine and alcohol have the same effect. According to Roberts, the acid normally exists in the blood as a quadriurate, and is ex-

creted by the urine as such; further, that an excess of uric acid in serum cannot remain long in solution. If the kidneys do not eliminate it, the increased quantity tends to its deposition in the body as a biurate, and the overloading of the blood with uric acid can only occur under one of two conditions:

(a) Either it is produced so abundantly that some of it is stored up in the blood, although the normal amount is excreted, or (b) with a normal production an abnormal amount is retained in the blood because of functional irregularities of the kidneys. If we admit the possibility of a retention of uric acid, then everything which is capable of temporarily increasing its formation will take effect; and by its secondary deposition into the tissues, the blood is again purified. If this deposition of the biurates goes on without disturbing the circulation in the lymph channels, little pain is experienced, but if suddenly the lymph channels become obstructed, pain, inflammatory symptoms, etc., are certain to be present. Roberts says that those tissues which are richest in soda are preferred regions for the deposit of biurate crystals. Finally, "the excretion of uric acid is influenced by age, diet, various physiological states, medicines, poisons and various diseases."

Haig maintains that dyspepsia is partly a cause and partly an effect of uric acidæmia and high arterial tension. Further, that uric acidæmia, when it contracts the arterioles, may practically suspend entirely gastro-intestinal digestion and absorption, and allow putrefactive processes to take their place. "Dyspepsia, on the other hand, will also cause or increase uric acidæmia. Suppose that there is no excess of uric acid in the blood, but that some indigestible substance, as a piece of pork, upsets the gastric digestion, the result of which is the more or less complete arrest of digestion and absorption, even if there is no vomiting; and this promptly causes a fall of urea and a corresponding fall in the acidity of the urine; the alkalinity of the blood is increased, and any uric acid within its reach is at once taken up in solution. Such is the usual causation of a 'bilious attack,' or uric acid storm, and the high arterial tension which results from the passage of the uric acid through the blood produces either headache or epilepsy, or, if the dyspepsia is chronic rather than acute, mental depression, and leads on to that general failure of nutrition which we call

Bright's disease. I believe that the relationship of asthma to dyspepsia is precisely similar, and in some cases the cure of dyspepsia is the cure of the asthma."

It has been a matter of observation in some of my cases of asthma and bronchitis that invariably the attack was preceded or accompanied by symptoms of disordered digestive functions, with nausea, coated tongue, fever, extreme restlessness, nervousness, loss of appetite, headache, dizziness and drowsiness, and even symptoms of slight jaundice; pains in the chest, with asthmatic or pure bronchitis symptoms, and later profuse seromucous or heavier expectoration, all of which symptoms were relieved by treatment directed primarily towards the hepatic and gastric disorders as a large increase in the excretion of uric acid occurred. These attacks in some cases occurred as often as from four to six weeks apart, and were all similar. It has also often been noticed that a gouty history or tendency to gouty diseases is present in persons who suffer from asthma. And indeed I am inclined to go further and to suggest, as a result of close observation, that many cases of rose cold and hay fever (if not all) have as the great basis of their existence some disturbance in the production or elimination of the uric acid or xanthin bodies, which acts as a powerful predisposing cause. The irritability of persons who are suffering from asthma, rose cold and hay fever is well known, and people subject to attacks of gout are not, as a rule, agreeable companions. And now having considered these points, which are entitled to a discussion in the pathology of asthma, what deductions, with reason and fairness, can be drawn from them in regard to the causation of it?

I.—It is clearly seen that if we admit that a paroxysm of asthma is directly due to a spasmodic contraction of the circular muscular fibres in the finest bronchial tubes, one of these things must occur:

(a) The contractions *must be intermittent*, and in the intervals between these respiratory contractile gasps the patient should experience comparative lulls of relief, which is never the case.

(b) The contractions *must be constant or tetanic in nature*, in which case it is hardly likely that any person could survive a prolonged and severe attack of asthma, if many tubes were involved, as asphyxia would in all probability result.

(c) The attack should pass away without the usual exudation of sero-mucous expectoration, which we find is not the case, although the quantity may vary in different attacks.

(d) There is no proof that the muscles of the larger bronchi are spasmodically contracted in an asthmatic attack; why should we suppose the smaller ones to be in this condition?

(e) Lastly, there has never been any substantial evidence produced that justified the acceptance of this theory.

II.—The evidence and clinical history as worked out with the theories of Webber and Haig, and as strengthened by the researches and experiments of Horbaczewski, Roberts and others (to which we have referred) leads us to confirm the statement that “asthma is a neurotic affection characterized by hyperæmia and turgescence of the mucosa of the smaller bronchial tubes and a peculiar exudate of mucin.”*

III.—The attacks may be caused,

(a) By direct irritation of the bronchial mucous membrane, though acting, of course, through the stimulating effect of various irritants, as dust, upon the fine endings of the bronchial nerves and producing vaso-motor changes in the bronchial vessels.

(b) Reflex irritation through the nasal mucous membrane, and hence paralysis of the vaso-motor nerves, which regulate the calibre of the bronchial arteries, with turgescence of the membrane, as explained.

(c) Reflex irritation from the mucosa of the stomach, intestines and genital organs, acting in the same way.

(d) By sudden fright, paroxysms of fear, violent emotion, etc., which are reflexly in the same way that an ordinary vaso-motor change or blush occurs upon the face, but modified, of course, by the size and location of the vessels and the function of the part affected.

(e) By the effect of a heavy, damp atmosphere, laden with moisture, which, I believe, acts by simply preventing the bronchial mucosa from parting with its normal amount of water, and hence favors turgescence with its accompanying paroxysm of dyspnœa. Consequently, a high altitude with a dry atmosphere, by permitting a free exosmosis or transudation of water,

* Osler, *Practice of Medicine*.

favors a diminution of bronchial congestion, a larger lumen for respiratory purposes, and hence freedom in breathing.

IV.—The predisposing causes of asthma are :

(a) The temperament, which is always referred to as the “neurotic,” and is simply a peculiar state of hypersensitiveness and instability of the entire nervous system, which, on the application of any irritant, readily allows its control over any vascular area, weakened by previous attacks, to be temporarily lost and a nervous discharge or explosion to vent itself at the point of least resistance.

(b) Chronic catarrhal states of the air-passages easily, by the partially altered condition of the bronchial vessels and partly diseased mucosa, naturally pave the way for increased swelling of the vessels and asthmatic attacks when once the habit of dilating on the slightest irritation is established.

(c) Anything which interferes with the excretion of uric acid, as age, diet, poisons, alcohol, gastric catarrh, disordered liver and various diseases. If the excretion of uric acid be interfered with, we have seen that high arterial tension of the bronchial arteries results, with secondary swelling of mucosa, but I am inclined to think that this curious effect of uric acidæmia is more apt to produce conditions which are favorable to the development of the true spasmodic asthma, or, as commonly called, bronchial asthma. There is also nothing to prevent our considering the bronchial lymph channels as very liable to be irritated by the biurate crystals circulating in them, and in such cases by exciting these vessels to give rise to the migration of leucocytes into the mucosa, and thence with the mucin secreted to form the round, gelatinous masses which constitute in the early stages of true asthma the sputum described by Curshmann. When they are unfolded they are seen to be very often in spiral forms. Further, the microscopic examination of these spirals reveals at times the pointed, octahedral crystals as described by Leyden, and I need only here call attention to a fact previously pointed out, that morbid conditions in which leucocytes are formed in excess and destroyed are apt to increase the production of uric acid or to be an outcome of such increase of such acid. Also that Leyden's crystals are identical with Charcot's octahedral crystals, which separate from the blood after death in cases of leucocythæmia. I think that these facts ought

to give us food for reflection upon the causation of true or bronchial asthma.

The swelling of the lymph channels would certainly increase the turgescence of the bronchial membrane, and could readily be the primary cause of sudden contraction and then dilatation of the bronchial arteries, leading to mucosal swelling and asthma. When we consider the irritating, insoluble nature of the biurate crystals, the annoying effect when deposited in the other localities in the body, there is no reason why the same irritation, modified by anatomical structure, extent of surface, etc., should not manifest itself in the way suggested, especially when other conditions acting as exciting causes are also at work. The most interesting question of all is, What relation, if any, do the Leyden crystals, which are probably of xanthin origin, bear to the uric acid compounds? Further, I believe that ordinarily the chief difference between bronchitis and asthma is one of degree only. The relationship between asthma and bronchitis and the digestive system is now apparently more clearly defined. Many so-called bilious attacks are simply uric acid storms, in which the liver and blood are temporarily loaded with this acid. *It is advisable in all cases of asthma, and in cases of persistently chronic bronchitis or of constantly recurring attacks of subacute bronchitis, to examine thoroughly the respiratory passages and organs for any special causes of irritation; to ascertain if any gouty diathesis be present; to examine carefully into the processes of digestion with special reference to diet, alcohol, etc., and to the excretion of uric acid; to keep a sharp lookout for leucocythæmia, anæmia and other previously-mentioned conditions that favor increased formation of uric acid, for asthma and bronchitis are not the results of simple, but usually of complex causes, which act in various combinations and thus give us many allied types of the same affections by so doing.* I regret that the length of this paper will not permit of any reference being made to the most important subject of all—treatment—and I shall therefore have to postpone the consideration of it to some future date.

COLCHICUM IN PERICARDITIS.—Chronic or subacute pericarditis, with exudation of water in pericardium, with severe pain about heart; oppression and dyspnoea, as if the chest were squeezed with a tight band: heart's action weak and indistinct; pulse, maybe, thread-like; in many cases a persistent feeling of icy coldness at pit of stomach.

PROTRACTED TYPHOID FEVER.

BY WILLIAM C. GOODNO, M.D., PHILADELPHIA.

(Read before the Interstate Homœopathic Medical Society, Scranton, Pa.,
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ALL busy practitioners are acquainted with the protracted character of this disease in some cases, also with the apparent mystery which often surrounds the cause or causes of such protraction. It is perhaps well, in considering this subject, to first define what I consider to be a protracted case of typhoid fever. Leaving out of consideration the very unusual cases of an abortive character, it is customary to state the duration of an uncomplicated case as three weeks. My own experience, corroborated by a careful study of the observations of the best observers, leads me to place it at twenty-two to twenty-three days. It is certain that the temperature-range is the best guide in determining this point, although there are other helps. I would like at this point to lay stress upon the statement that only such practitioners as employ the clinical thermometer and other important methods of examination most intelligently are capable of expressing valuable opinions upon this subject. In the average case, pursuing a normal course, then, the temperature must be practically normal somewhere about the twenty-first to the twenty-third day. A few cases will present a normal temperature by the eighteenth or nineteenth day, and others, which are to engage our attention at this time, are protracted beyond the twenty-second to the twenty-third day. It may be stated as an axiom that elevated temperature, or a continuance of symptoms beyond the period suggested as the limit of the normal, constitutes the case one of abnormal character. The variation from the normal type may be trivial, or such as to imperil life in the highest degree.

In order to make this paper as practical and concise as possible, I will first state my conclusions, and then discuss a few of them.

Abnormality in the later stages and undue protraction of typhoid fever is the result of many causes, prominent among which we may consider:

1. Feeble heart, the result of granular or vitreous degeneration of muscular fibres, which is usually associated with changes in the blood-vessels, general muscular system, and impaired innervation.

2. Degenerative changes in the renal epithelium, with more or less of an approach to nephritis. Acute nephritis.

3. General muscular degeneration, usually associated with marked changes in the epithelial, glandular, and other tissues.

4. Persistence of ulcerative lesions in the alimentary tract.

5. Feeble digestive power, due to

a. Degeneration of the muscular coat of the stomach and intestines.

b. Defective and deficient secretion of gastric and intestinal juices.

c. Improper food, excitement, or too early exercise.

6. Pulmonary changes.

I will refer first to the last named, *i.e.*, the pulmonary changes. If the disorder is of pronounced character it will probably be plainly indicated by cough, dyspnea, expectoration and other symptoms associated with pectoral disease, and indicate at least one cause of protraction of the case. The important thing to remember in respect to lung complications is that a serious degree of disease may develop during the late stages of typhoid fever, and much prolong the case, without the presence of sufficiently well-marked symptoms to attract the attention of any but an expert observer of these organs. The lesions met are various in character, but most frequently it is hypostatic congestion or hypostatic pneumonia. In either case the physical signs are most pronounced over the bases of the lungs posteriorly. Occasionally a well-marked broncho- or croupous pneumonia may develop, but these are seldom of a frank type. In all cases of typhoid fever in which the progress is unsatisfactory, or the duration abnormally prolonged, physical examination of the lungs is of first importance in determining the existence or absence of lung complications, and, indeed, should be practiced carefully and repeatedly in all cases of typhoid fever, even if pursuing an apparently normal course, otherwise the attendant is often caught napping. As the physical conditions are not identical with those present when these various types of pulmonary disease are primary (in so far as they are

met in a primary form), the physical signs must not be expected to invariably possess precisely the same characteristics as when met in association with the primary affections. Careful auscultation and percussion furnish the most important information.

Accumulation of fluid in one or both pleural sacs is rarely met, and often overlooked. It is, perhaps, most often due to a renal lesion which has preceded the typhoid fever. The type of renal disease, if pre-existing, is almost invariably that of interstitial nephritis.

Examination of the heart is apt to be overlooked, especially if cough, expectoration, or other symptoms relating to the lungs are present, the latter being apt to distract attention from the former, but it is not very rare for an old valvular lesion which has heretofore caused little or no trouble to become the seat of an infective inflammation with all its consequences. Endocarditis or myocarditis may develop in the course of, or at the conclusion of typhoid fever, and prove the cause not only of protracted convalescence but death. The same may be stated of pericarditis, which proves a most serious attendant. The most frequent of heart changes, however, is the well-known degeneration of its muscular fibres resulting from the combined deteriorating influences generated by the specific element. In its simple form—granular degeneration—it is probably in some degree invariably present, and in its higher degree—vitreous degeneration—it is quite frequently met in serious cases. The diagnosis of these conditions is surrounded by much difficulty, but some aid is received from ascertaining the state of the general muscular system. The weakness of the heart in cases of well-marked degeneration is out of proportion to that of the system at large. The muscular element of the first sound of the heart is eliminated and temporary heart-murmurs may be detected.

Degenerative changes in the renal epithelium, with more or less of an approach to nephritis, or an actual nephritis, represents one of the most frequent causes of protraction of typhoid fever. Such conditions are often associated with weak heart, pulmonary disorders, ulcerations within the bowels, etc. A little albumin in the urine, at the height of the disease, is not uncommon in cases which progress to a prompt convalescence,

but beware of those in which the albumin persists beyond the normal duration of the disease and is accompanied by tube casts. The appearance of the urine is often normal, not voided with increased frequency and consequently it may not occur to the attendant to examine it. The quantity is often small and the urea reduced to one-third or less of its normal amount. These patients are apt to have a little delirium at night and various symptoms which suggest a slight degree of uræmia. In others, with even greater urinary changes, uræmic symptoms are absent. It is exceedingly rare for blood and other urinary evidences of a very acute nephritis to appear. I have never seen it except in cases in which I knew, or it was reasonable to suppose, that a chronic renal affection preceded the typhoid fever, or some form of serious cardiac disease was present, such as ulcerative endocarditis.

The influence of intestinal changes in the development of symptoms is generally recognized. Unfortunately, however, considerable ulceration may persist and increase without it being possible for a time to detect it or determine its influence in protracting an attack. In a given case of this character there may be a little or no diarrhœa, the appetite good and abdominal distension or tenderness may have disappeared. Under such circumstances the temperature, which has perhaps been normal for days, rises and is accompanied by symptoms of a general character only, several days elapsing before the aggravation can be referred to its proper point of origin, which is suggested by a return or increase of diarrhœa and abdominal symptoms.

Feeble digestive power is another cause, and may or may not be associated with fever. It is evidenced by want of appetite, accompanied by a variety of dyspeptic symptoms, even vomiting, particularly if food is imprudently pushed. The causes, aside from the degree with which the digestive organs share in the debility of the patient, are degeneration of the gastric mucous membrane, enfeeblement of the muscular coat of the stomach, associated with the same conditions in the intestinal tube, with the result of defective and deficient gastric and intestinal juices and atony. As the changes are organic, time is required for their elimination, which indicates the necessity for the greatest care in the matter of diet and usually for a long

time. In association with this state of the alimentary tract the entire muscular system may be in a condition of vitreous degeneration, suggested by utter muscular feebleness of the patient.

The readiness with which the conditions considered and others may be overlooked is exemplified by a review of my personal experience for a short time. During the past year I received a letter from a young physician in a distant State detailing a protracted case of typhoid fever, at that time in the seventh week of the attack, and asking for "a remedy." I replied, "Your patient has not typhoid fever now; hunt for the cause of continuance of the illness. Examine the heart, lungs, nervous system, urine, etc." He replied: "I have slipped up; my patient has nephritis." Attention to the renal lesion resulted in a slow recovery.

A few weeks since a friend, a most excellent and hard-worked physician, asked me to visit a case of typhoid fever with him. A general examination revealed nothing of importance. The lungs were nearly normal, the heart was sound but feeble, the bowels were not loose nor the abdomen distended. I remarked to the doctor, "Kidneys are all right," and received the reply, "I think so, but I have not examined the urine except by inspection. She is an old patient of mine and has never suffered from any urinary disorder." Examination of the urine, however, demonstrated the presence of albumin, granular casts, a few pus cells, some mucus and an ammoniacal odor. The urine decomposed rapidly. The catarrhal feature indicated as coexisting with a nephritis was probably due to catheterization, which was demanded during the height of the attack.

I could add another case in which an undetected diabetes caused a great eruption of boils during the convalescent period, controlled only by energetic dietetic and antidiabetic treatment; another, in which the protracted debility, pains, disorder of vision and a variety of symptoms were due to locomotor ataxia; and still another, in which a subdiaphragmatic abscess was responsible for delay in recovery. Examples might be multiplied and other causes mentioned, but as I desire to present a short paper, I will refrain from detailing any more.

In conclusion I would call attention to the following:

1. The duration of a normal typhoid fever is about twenty-

one to twenty-three days, this period representing the pathological changes and symptoms which develop from the action of the specific organism and its products.

2. The continuation of the disease beyond this period of time is due to persistence of such pathological lesions or the development of new ones, the latter being seldom the product of the action of the specific organism, but, perhaps, in many cases, to a mixed infection.

3. The practical application is, the necessity, in all cases of abnormal continuance of typhoid fever, to search for the lesion or lesions responsible for it, and, finally, the influence of a correct diagnosis upon treatment.

IMPORTANCE OF EARLY SYMPTOMS OF HEART DISEASE.

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(Presented to the Homœopathic Medical Society of the State of New York.)

To those who have made a special study of the heart and its disorders, any words of mine suggested by the title of this brief paper can seem but trite and commonplace. Observation, however, has brought the conviction that many physicians in active practice, well-grounded though they have been in the principles of the causes and manifestations of cardiac disease, have relegated much of their knowledge of these topics to those secret recesses of their brains where they keep locked up the anatomy of the sphenoid bone and the distribution of the sympathetic nervous system. Undoubtedly there was a time when it was all at their instant command, but the demands of so-called general practice, with its multiplicity of minor ailments, the attention to special work on other lines, and the lack of opportunity and material with which to confirm and increase their knowledge, have reduced them to the condition of being, to put it mildly, somewhat rusty in this particular field.

Observation also demonstrates the fact that our method of

treating disease, calling for a remedy indicated by a particular group of symptoms, and understood by many to *exclude* the casual factors, leads to carelessness in diagnosis and a tendency to consider the *cause* as being of no moment, provided only the correct remedy be chosen. While not disputing the assumption that symptoms alone should be considered in selecting a drug, I believe that the *cause* of a disease, if known, will help in fixing the attention upon a group or groups of drugs, and should be taken into account in the final prescription. But the prescription, however important, is not the whole duty of the physician. He must find out the cause of the disorder with a view to its removal, if that be possible, and if not, as in the case of cardiac diseases, with the idea of laying down for his patient rules of life which will tend to relieve the affected organ and put off, as far as may be, the inevitable break-down. My contention, demonstrated by many instances that have come under observation, is that but little benefit can be expected from a remedy prescribed for any group of symptoms so common in cardiac affections if the patient be allowed to continue habits of life, conduct and exercise, which, in themselves harmless for the healthy, are overtaxing a diseased heart and *producing* the symptoms. In this case, without removing the actual *cause*, in other words the indiscretions, the remedy usually fails, and the physician and our faith are both discredited. That is to say, for a given group of symptoms, the drug prescribed by the physician who has found out that the cause lies in some pathological condition of the heart will be of service because by reason of this acquired information the casual factors may be diminished, or in some measure removed, while the drug prescribed by one who studies the symptoms never so carefully, but through failure to arrive at a correct diagnosis allows the exciting causes to continue, will be of but little value, and his faith in the action of the similimum will be necessarily impaired.

On these grounds, then, it has seemed worth while to call attention to the importance of an early diagnosis in disease of the heart, and to speak briefly of certain symptoms which to the practiced observer call instant attention to the heart as the probable seat of disease, but which (and this will be admitted, I doubt not, by all in the habit of seeing many cases for careful

diagnosis) are frequently looked upon as trivial or as due to disturbances of other less important organs, and which come under the observation of the diagnostician *because* they have not been cured by the remedy which has seemed to be a perfect similitum.

And stress should be laid upon *early* diagnosis. It would be unfair to assume that any member of this Society is unable to recognize a marked lesion of the heart in its later stages, though, sad to relate, such instances have come to our notice; but I do know that many physicians, for the reasons above noted, are not in the habit of looking to the condition of the heart for an explanation of certain symptoms, and frequently, through lack of practice in the art of diagnosis, are not able to recognize departures from the normal. Any man not blind can recognize an ocean liner anchored in mid-stream, but it takes an expert with his instrument of precision, the telescope, to recognize the rig and nationality of the blur of smoke upon the ocean's horizon.

Another element at work in causing the tendency to neglect a careful examination of the heart is the well-known fact that subjective symptoms, ascribed by the patient to what he fears to be "heart disease," are in most cases due to impaired function of some other organ, the heart itself being sound. It is a case of crying "Wolf! Wolf!" and the physician, so often deceived, falls into the habit of looking upon such cases as renewed instances of unnecessary "scare," and forgets, to his own subsequent chagrin, that though in most cases the above-mentioned rule is true, still instances do occur when the subjective symptoms really do indicate a cardiac lesion, and finds that in neglecting or ridiculing them he has driven a serious case from his own care to the attention of another physician. The latter, if actuated by a high sense of professional courtesy, finds it hard to reconcile his own conclusions, in the mind of the patient, with the statements of the first examiner, and if not so actuated, finds it a simple matter to steal a case by demonstrating the presence of conditions which it is easy to convince the patient should have been discovered by anyone of reasonable skill. This is but a sordid view to take of the responsibilities of our profession, but it should prove effective with those who have allowed themselves to drift into careless habits of thought

and work in connection with the task of building up their professional reputation.

It should also be borne in mind that not every one has the particular mental endowment necessary to make of himself an expert in the art of physical diagnosis, yet any one can become to a reasonable degree proficient. But (and herein lies the reason for many careless or ignorant diagnoses) no one can attain even this moderate proficiency without constant practice, without the education of the eye, the hand and the ear in the examination of case after case, and the careful systematic recording of the conditions found, and the solution of the diagnostic puzzles by the fitting together of the facts derived from each and every method of investigation at his command. Even though he does find, time and again, only normal conditions existing in the organs under observation, still the benefit of the practice, of the constant practice, is simply incalculable, in that by training his senses to a correct appreciation of physical signs in the normal subject it puts him in a condition to at once recognize departures from the normal, thus making him cognizant of the fact that there is something abnormal, and prompting further investigation or reference to an expert, in this way saving his reputation with his patient. No patient thinks less of his doctor for frankly stating that he finds some condition existing which puzzles his skill, and in the study of which he would like an expert opinion, but every patient loses faith in the physician who fails to relieve him, and who is subsequently proved to have been unequal to the task of making a correct diagnosis.

The scope of this paper does not permit of an extended discussion of all the symptoms of cardiac disease, but I desire to call attention to some of the earlier manifestations, and the importance of the knowledge that their very presence calls for thorough investigation of the condition of the heart. It should be stated that careful investigation requires not only one examination of the heart, but in doubtful cases presenting any of these suspicious symptoms a number of examinations are often required to prove that the heart is sound or that it has begun to develop some organic lesions.

Dyspnœa.—In most instances this is by far the earliest evidence of some failure on the part of the heart to keep up to its

work. In railroad parlance it is the "distant" signal of danger, and when shown requires instant "slowing up," and without excuse for its disregard. The presence of dyspnœa should be looked upon in a similar way by the physician, and an instant investigation be made to ascertain whether a diseased heart is its exciting cause. Undoubtedly, this symptom arises from abnormal conditions elsewhere, as in pulmonary disease, adiposity, anæmia and others; but in the absence of these conditions—usually readily perceived—it should be assumed as due to cardiac disease until the heart is proved to be sound. And by dyspnœa is not meant the exaggerated shortness of breath and orthopnœa which come with the later stages of cardiac disease, but that earlier symptom, a slight though manifest desire for a little more air upon exertion, prompting the patient to express it as "just a little short-winded," or to say that he is not quite up to the usual mark, in that he finds the stairs a little harder to climb, or that it "blows" him a little to walk against the wind. These are apparently trivial conditions, but they are the danger-signals, and it is at this stage of the disease that prompt recognition and conservative hygienic measures will be of greatest value. The proper appreciation of this early symptom, therefore, is of great service in so important a direction as the actual prolongation of life. If overlooked or neglected, the dyspnœa increases, the heart grows less and less able to continue its efforts, and a general break-up astonishes the doctor quite as much as it dismays the patient.

Variations of the Pulse.—It is to be deplored that since the introduction of the clinical thermometer the pulse has received less attention than formerly, when the number of its beats, together with the warmth of the surface, were the only means of estimating the degree of fever. To-day the study of the pulse is a neglected art, and in many instances its record is taken because it is the proper thing to do, and the patient expects it, as he does an inquiry into the condition of the bowels, and the request to be allowed to examine his tongue. The sphygmograph, with practice, will give valuable evidence in the direction of the proper performance by the heart of its work; but even without this instrument there are many things shown by the pulse which demonstrate that the trouble has to do with the heart, and which serve to call our attention to this organ.

An unusually rapid pulse, in the absence of fever, should at once prompt the suspicion that the heart is affected, either by disturbance of its nervous supply through the sympathetic system or by the necessity for beating more often in the attempt to do more work—this attempt being called out by some mechanical abnormality of the valves or some inherent weakness of the heart-muscle, so that it is not able to keep up with the demands made upon it.

A slow pulse, 60 or less, usually occurs only in the aged. If found in younger subjects it accompanies grave cerebral lesions, the symptoms of which are sufficiently manifest to exclude the heart itself as a causal factor. The slow pulse is usually characterized by a sensation under the fingers of being slowly filled, as if the heart were taking more time in which to make the ventricular systole, with a marked lack of vigor and an apparent disinclination to do it at all. This is, in fact, the actual state of things; for in the aged, not only is the heart-muscle itself in a measure degenerated, but the arteries have lost their elasticity, and present therefore a greater mechanical obstacle to their proper filling with blood. The slow pulse, with the further peculiarity that on the least exertion it becomes unduly rapid, is one of the early signs of the approach of the above-mentioned changes in the heart-muscle, but to an abnormal degree and extent. Many fibres have been destroyed, but sufficient remain to keep up a regular though slow contraction. On encountering any obstacle to the emptying of its cavities—such as ensues upon moderate physical effort, or even mental excitement—the heart, suddenly overtaxed, rebels, and struggles like a captive bird in the hand, gradually returning to its normal quiet after a period of bodily rest. The pulse of this character should always be considered of grave import, and prompt the greatest pains in the search for further corroborative evidence of the story it tells.

An irregular or intermittent pulse should also direct attention to the heart. These abnormalities are far more common in younger subjects than the others mentioned, and are rarely due to disease of any organ except the heart. They are not so common as are early symptoms of the chronic cardiac lesions, but they *are* early symptoms of those acute affections which almost always result in valvular lesions. Their occurrence at any time, except in the evident approach of dissolution, should

raise the suspicion that there is something the matter with the heart in addition to any other disease already present.

Dropsical Affection.—A common error in connection with this manifestation of heart-weakness is the failure to perceive its presence until it has reached an extent that is actually troublesome to the patient. At this time it is of little value as a diagnostic symptom, and shows only a greater or less degree of circulatory stagnation. The slightest hint of its appearance should be at once investigated, and it should not be dismissed with a casual notice, but its location, time of appearance, and conditions of aggravation should be minutely noted, and the patient's explanation should not be accepted, as is too commonly done. We know that dropsy of cardiac origin most commonly appears in the feet and ankles. Its earliest appearance is usually in the way of a slight ridge or puffiness about the tops of the shoes, disappearing after these are removed, and always absent after a night's rest. The patient will often say that it is due to tight shoes, and the doctor too often accepts this statement, forgetting that few people wear shoes sufficiently confining to produce this result, and thus misses the significance of a symptom that is in reality of the utmost importance, as indicating that the heart-muscle is just beginning to be unable to keep the blood flowing evenly through the more distant and dependent portions of the vascular system—a small matter, if you will, but of vast diagnostic significance.

Pain.—This is one of the most misleading of all symptoms in connection with the heart. There are so many causes for the production of pain under the sternum, and the laity are so ready to attribute every pain in this locality to the presence of heart disease, that the physician readily falls into the habit of making light of the matter and prescribing with a view to removing simply the symptom, forgetting that though in a large percentage of such cases the heart is not involved, still in quite a number this pain is nature's danger-signal telling of weakened heart-muscle. Even when noted it is often called angina pectoris, and the statement made that angina is a symptom, and not a heart lesion. It should be remembered that the perfectly sound heart does not permit the patient to have angina pectoris. There may be no valvular lesion present, but the con-

sensus of modern views on this affection lays it down as an axiom that sharp radiating or dull aching pains in the præcordial region, possibly running into the arm or down the back in the absence of other cause, are due to the rebellion of a weakened heart-muscle against work beyond its capacity. It is excited not only by exertion, and in this case its development is readily understood, but by exposure to cold, by excitement, or other emotions. The explanation of the action of these latter causes lies in the fact that here, by reflex vasomotor influence, the superficial capillaries are contracted over a large extent of the body. This, by diminishing the calibre of the arterial system and creating an obstacle to the proper emptying of its contents into the veins, throws an extra load upon the heart, and the angina is the result. The importance of the præcordial pain as an early symptom lies in the fact that the changes to which its presence is due are in every case progressive; that by an early recognition of their commencement much may be done to delay their progress and the patient warned that, though to all appearance he is in fair health, still his heart is in such a condition that by sudden or severe physical exertion he may so cripple it that even if it does not kill him it may incapacitate him from the usual duties of life and unfit him for any existence but that of a chronic invalid. As already stated, this symptom is of value only when every other cause for its appearance has been excluded.

Condition of Arterial Walls.—It is a part of the gradual change and decay of old age that the arterial coats should undergo a change in structure, commonly known as arterio-capillary fibrosis, or general atheroma. It is easy to detect this change when well-marked by the tortuous temporal artery, and the peculiar hardness and density of the radials under the finger, resembling to a greater or less extent the “feel” of a pipe-stem. We know that when found elsewhere this process affects the coronary arteries as well, narrowing their lumen, diminishing the blood supply of the heart-muscle, and thus weakening, and in time destroying, its capacity to contract. We expect all this in old age, and its occurrence, with all the consequences, is but part of a physiological process. If it were found only in the aged it would be of little diagnostic value. The fact, however, that it occurs in persons far from aged gives

its detection an immense importance. Its early development means a premature old age, for, as it has been aptly put, "a man is as old as his arteries." It is easy to discover when well marked, but it takes the "tactus eruditus," the educated fingertip, to appreciate that indescribable change in the sensation as the artery is rolled under the finger. The fact that the artery can be rolled under the finger without yielding of its walls proves that these changes have begun which render the wall of the blood-vessel hard and brittle. These changes always precede the heart-changes already mentioned. We know the causes that produce them—alcohol, improper and excessive food, chiefly of the nitrogenous variety, care and worry, and anxiety. The earlier our senses detect them, just so much sooner can we arrest, in a measure, their progress by stopping the exciting cause. This early discovery thus enables us to give our patients a much longer lease of life, and not only life itself, but greater freedom from the debility and impairment of function which too often make life a burden and death a release.

It would be possible to enumerate many more of the symptoms occurring early in the course of disease of the heart, but those above described are the most important and most common, and also those to which, too frequently, but little importance is attached.

In closing, suffice it to say that the object of this paper has been twofold :

First, to emphasize the importance of careful physical examination of the heart in every case of chronic disease ; and, second, to call attention to the most important of those early symptoms which, apparently trivial, are of the utmost consequence in directing our attention to the heart as the organ at fault.

PHLORIDZIN IN DIABETES MELLITUS.

BY E. R. PAILLOU, M.D., ST. LOUIS, MO.

DURING the past two years the writer has been using the glucoside, phloridzin, in the treatment of diabetes. Realizing that the announcement of a curative agent in a given disease

without definite clinical evidence as to its efficacy might lead to wrong conclusions, he had determined to make exhaustive tests before calling attention to what promises to be a remedy of some value in the treatment of diabetes mellitus in its renal form, at least.

In view of the fact that phloridzin has recently been referred to in the columns of the *HAHNEMANNIAN* as a *theoretical* remedy in the treatment of diabetes mellitus, the writer believes he is justified in bringing before the profession his limited experience with the practical use of that drug in this disease. He was induced to test phloridzin as a curative agent in the treatment of diabetes mellitus by the knowledge that this substance has been frequently used by German scientists, experimentally, to produce an artificial glycosuria. As it seems to produce a *renal* form of the disease, it is reasonable to expect that the curative power of phloridzin will be found greater in this than in other forms of diabetes. The preparations used in these cases were the third and sixth decimal triturations.

CASE I.—A. M., a Jewish gentleman, aged 42 years, an architect, consulted the writer January 2, 1895. He had then been troubled for two years with dry mouth and frequent profuse urinations. He had several times consulted his family physicians, but no diagnosis was made, so little attention was given by the patient to the symptoms. An examination of the twenty-four hours' urine for several days revealed the fact that he was passing an average of 11 pints per diem, the urine having a specific gravity of from 1038 to 1040, with from 36 to 41.75 grains of sugar to the ounce. The patient was a voracious eater, taking four daily meals, consisting mainly of beef and mutton, with a generous supply of wine or beer. In spite of his enormous appetite he was becoming more and more emaciated. His sleep was normal, and his physical and mental vigor unimpaired in any way.

On January 5th the patient was put upon a rigid antidiabetic diet and given placebo for one week. At the end of that time no improvement was discernible; this was considered remarkable at the time, but in the light of later research we know that there is a form of diabetes mellitus which is not influenced by diet, namely, the renal form. The writer believes this case to have been one of renal diabetes mellitus.

The usual remedies were prescribed without beneficial result, excepting only phosphoric acid, which relieved the great thirst for a few days, without, however, reducing the amount of sugar excreted. On January 30th phloridzin was prescribed. The result of its administration is shown in the subjoined table :

Dates.	24 hrs. urine in ounces.	Specific gravity.	Sugar, grs. to ozs.	Prescrip- tion.
Jan. 20,	184	1039	41.75	Phloridzin.
Feb. 4,	168	1037	37.9	"
" 6,	162	1037	37	"
" 11,	160	1035	35.7	"
" 18,	128	1036	35	"
" 24,	131	1034	33.5	"
Mar. 4,	112	1033	32	"
" 8,	112	1031	30.5	"
" 11,	96	1030	30	"
" 16,	88	1030	29.4	Placebo.
" 20,	131	1036	35.25	Phloridzin.
" 25,	80	1029	27.5	"
Apr. 2,	72	1026	24	"
" 4,	64	1026	22.5	"
" 9,	64	1026	21	"
" 11,	64	1026	20.5	"
" 14,	64	1025	19.3	"

Most unfortunately, at this time the promising patient was exposed to a cold, sleety rain for six hours, and pneumonia ended his life in three days.

CASE II.—Mrs. N., aged 62, has had diabetes mellitus for four years; passes daily 8 pints of urine, having a specific gravity of 1032 and containing 22 grains of sugar to the ounce. She had been under "regular" treatment, and was better while taking opium or its alkaloids. The patient is fleshy, and has a good appetite, especially for sweets. A strict antidiabetic diet and placebo for five days resulted in a decrease of urine to 5 pints; specific gravity, 1028; containing 18.5 grains of sugar to the ounce.

August 15th prescribed phloridzin and a modified diet, which in thirty days apparently reduced the urine to 4 pints; specific gravity, 1027; sugar, 16 grains to the ounce. Subsequent use of this remedy failed to be of any benefit, and the patient grew steadily worse until phloridzin was discontinued and the extract of pancreas was prescribed. In two months the urine was reduced to 4 pints; specific gravity, 1025; sugar, 8 grains

to the ounce. The patient discontinued treatment at this time, November 26th, considering herself cured.

CASE III.—R. L. C., an engineer, aged 47 years, has had diabetic symptoms since October, 1895. He is emaciated and has a voracious appetite. Applied for treatment March 10, 1896. At this time he was passing daily 6 pints of urine, having a specific gravity of 1030. A quantitative analysis showed 15 grains of sugar to the ounce. A rigid diet for one week reduced the urine to 5 pints; specific gravity, 1028; sugar, 12.5 grains to the ounce. March 25th a modified diet and phloridzin were prescribed. On April 2d the figures read: 4 pints; specific gravity, 1026; sugar, 8 grains to the ounce. April 15th, no material change. April 30th, $3\frac{1}{2}$ pints; specific gravity, 1026; sugar, 6 grains to the ounce.

On May 20th the amount of urine was the same, but the specific gravity was reduced to 1025 and the sugar to 4.5 grains to the ounce. As the patient improved, a more generous diet was permitted, but the change was made very slowly and the result carefully watched. The only articles which produced an increase in sugar were malt liquors, liver, syrups and sweet-meats, which were and are still interdicted. The last examination was made on August 20th. The amount of urine was $3\frac{1}{2}$ pints; specific gravity, 1024; sugar, 1.75 grains to the ounce. The patient suffering no inconvenience, considered further treatment useless, and discontinued his visits.

THERAPEUTICS OF DIABETES MELLITUS.

BY CLIFFORD MITCHELL, M.D., CHICAGO, ILL.

II.

I HAVE had so many letters from physicians in regard to my article in the January number of the *HAHNEMANNIAN*, that I feel interested in giving all particulars possible.

In regard to the first patient treated with the mineral water, full data are at hand, as he was himself a physician, and was attended by a colleague of mine, while, as consultant, I examined the urine frequently, and saw the patient often. The his-

tory of the case is stranger than fiction, and not less dramatic in many ways.

Patient was male; physician. July, 1889, when 41 years of age, weighing 240 pounds, noticed that he was voiding a great deal of urine. By December, 1889, he was conscious of greater thirst than usual. Tests for sugar in the urine were negative, so he paid no attention to the matter. February, 1892, he applied for life insurance, and was rejected on the score of diabetes mellitus. Quantity of urine was then about six pints in 24 hours. There were no troublesome subjective symptoms, so he neither regulated his diet nor took medicinal treatment.

In June, 1893, sugar was present in such quantity in the urine that, as a measure of precaution, *he partially restricted his diet, and began to take jumbul seeds in doses of three grains, three times daily.* In the latter part of October the quantity of sugar was reduced one-half. He kept on with the same diet and drug until March, but there was no further reduction in the amount of sugar, so from March until June he discontinued the jumbul.

By the middle of June he felt worse, *so began again on jumbul, and also took phosphoric acid.* Moreover, he tried the hot-water treatment, *drinking it before meals*, but taking only the ordinary drinking-water of the city. *He kept up the hot water for five months.*

He grew steadily worse, and in November began to be numb in his fingers and toes. The numbness extended gradually until, December 10th, he was practically paralyzed to the knees and elbows. He could walk, but, as he expressed it, "he didn't know where his feet were."

He then restricted his diet to meat, eggs, cheese, butter, and one small slice of bread at each meal.

I recommended phosphate of strychnine, third decimal, which he took without benefit in any way.

He was now in Chicago, having come here for rest and change. But in spite of everything he grew worse. *Electricity* (faradic current) was tried for the numbness, but without avail.

By the middle of December his condition was deplorable; for an entire year he had kept watch on the specific gravity of his urine, and had never seen it below 1038. The quantity of urine was several gallons daily. He had lost flesh, and could

with difficulty use either arms or legs. About this time the same "unpretentious circular," which was so promptly pigeon-holed and forgotten by the writer, came into his hands. After reading its claims in curing diabetes, he said, pessimistically, to his attending physician: "Doctor, here's another lie; what shall we do with it?" so discouraged had he become, and so hopeless was he of receiving benefit from anything or anybody. Nevertheless, human nature got the better of professional skepticism. On thinking over the contents of the circular, he determined to try the water, saying, in his sententiously dramatic way: "I'm a drowning man. Here's a straw. I'll clutch at it!"

That night he "clutched" to the extent of drinking two-thirds of a glass of the mineral water, and in ten minutes two-thirds of another one. Five hours later he voided urine, and on taking the specific gravity, as was his invariable custom, was amazed to find it 1021 only! He called to his colleague, who verified the reading of the urinometer. "I'm going home," was the patient's terse comment. "I'm cured!"

* * * * *

He took the water steadily from then on.

December 31st I examined his 24-hours' urine, and found it as follows: Quantity per 24 hours, 50 fluidounces; specific gravity, 1032; urea, 500 grains total; phosphoric acid, 30 grains total; sugar about 3 per cent., or 700 grains total.

In two weeks' time the quantity of urine had come down to normal, thirst had yielded, and the numbness began to improve.

January 19th, I examined the urine again, and found a remarkable gain: Quantity per 24 hours, 56 fluidounces; specific gravity, 1017; urea, 433 grains; sugar, too small to determine by fermentation. Haines's test shows a trace as the liquid cools.

On February 20th he was voiding 34 fluidounces of urine with about 150 grains of sugar in it; April 3d, 53 fluidounces of urine with 80 grains of sugar total.

At that time he felt so well that he went home and began practice again. The numbness was almost entirely gone, so that he was able to use both hands and feet as usual.

* * * * *

This was two years ago. Has he relapsed? Not yet. I saw him last week and examined his 24 hours' urine again. On the

day in question he passed 50 fluidounces of urine with 250 grains total of sugar. Some days, he says, there is no sugar at all. He is substantially where he was two years ago at this time. He says he is conscious of a slight numbness in his fingers, but it gives him no trouble. In other respects he is well, cheerful, and like his own genial self. It does one good to see a brother practitioner relieved from diabetic distress for so long a period. His case appears to me to bring out the following points:

1. Diabetes mellitus in a stout man over 40, pursuing for years a mild course, then suddenly becoming severe.
2. Partial restriction of diet together with administration of jumbul seeds in 3-grain doses reduces the sugar one-half in 4 months' time.
3. The improvement, seemingly due to partial diet and jumbul, does not continue, not even after 9 months' trial.
4. The taking of ordinary drinking-water, hot, before meals, for 5 months, has no perceptible effect.
5. Rest and change have no effect.
6. Partial paralysis comes on; electricity and strychnine do not help.
7. Stricter diet has no more effect than any of the previous measures. The specific gravity for a year does not fall below 1038.
8. After drinking less than two glasses of the mineral water the specific gravity falls to 1021.
9. The mental effect of seeing the specific gravity back to normal again is good.
10. In two weeks after use of the mineral water thirst and numbness begin to yield and the urine is normal in volume. After a month's use of the water, sugar is absent on some days, present in small quantity on others.
11. Two years later his general condition is good and the sugar *in statu quo*—absent on some days, present in small quantity on others.

If I had not examined the urine in this case and seen with my own eyes the change which took place in it, I should be decidedly skeptical in regard to the truth of this story. Had I not seen quite as rapid improvement in other cases under the same treatment I would have attributed the improvement in the first case to natural conditions and not to the agent used.

There is one point, however, on which I failed to lay stress in my first article but which I now regard as probably essential: *the water is to be taken, preferably hot, before meals.* My first patient says that he has made it a point to drink the water *ad lib.* between meals, but that real benefit is not obtained except when the water is taken just before meals. His idea is that it in some way influences digestion, so that the food is not converted into sugar.

Lastly, and by no means least, it remains to be proved whether other mineral waters taken systematically hot, before meals, for weeks and months, will not do just as much good as the spring in question.

What I desire to learn from the profession, and what I specially ask the twenty or more physicians who are now testing the treatment to tell me, is the following :

1. Does the treatment benefit women at all?
2. Does the treatment help women who are diabetic from nervous shock, as from loss of family?
3. Does the treatment help lean men?
4. Does the treatment help hereditary cases, or where there are several in the same family?
5. Are children in any way helped by it?
6. In how many cases which have been helped is there, so far as known, an uric acid tendency?
7. Are there any cases at all in which thorough use fails to relieve thirst?

I have used the treatment on twelve cases in all, and find it most successful in the case of fat men. I have not, so far as known, cured any woman at all with it, although two women insist they are better, but they will not have their urine examined. It was tried in the case of one or two children, but abandoned on account of the difficulty of regular administration; so far as could be seen it did no good. I am anxious, however, to see it carried out with Spartan discipline in the case of some one child. If it would relieve the thirst, the child might come to take it regularly.

Dr. Kirch, of Dundee, tells me he has used the treatment* in

* I prefer the term treatment to water because the giving of the mineral water with regularity before meals seems, so far as I know, to constitute the treatment.

two cases, both women; in one case, a hereditary one, no benefit whatever, so far as he could see, was derived; in the second case the thirst was relieved and the sugar almost disappeared; but the patient, being gangrenous before the treatment was under way, died of septic infection.

Will other mineral waters given as above do just as well? Let somebody whose patient improves under the water in question substitute another mineral water of essentially the same character, and see if the improvement is maintained. Will distilled water act as well?

A number of such questions remain to be answered, and I will greatly thank those physicians who are trying the treatment if they can throw light in any way on what is to me an exceedingly difficult thing to account for, namely, the rapid improvement in some cases of diabetes mellitus under this treatment.

ADDENDUM.—Since writing the above I have examined the urine of another patient, a woman who has been under my treatment for two years. In February, 1895, she was passing 78 fluidounces of urine of specific gravity 1025, urea total 820 grains, phosphoric acid 50 grains, sugar one per cent.; total sugar 465 grains. Her chief complaint was in regard to pains in the back, chest and head. There was so much uric acid in the sediment that I put her on salicylate of lithium, which relieved the pains but did not reduce the amount of sugar. She went to Carlsbad and took the treatment there, but in spite of everything the sugar increased in quantity, until in November, 1896, it was three per cent. and in total more than 1200 grains. I put her on the mineral-water treatment, and in March, 1897, the sugar is down to one per cent. again, with a total of 365 grains, urea 620 grains, phosphoric acid 32 grains, uric acid 12 grains. There is, therefore, not only an improvement as regards sugar but also as regards other urinary solids.

KREOSOTE IN DIARRHŒAS.—Very offensive, dark brown, undigested, generally associated with more or less nausea, sometimes with vomiting. Dysentery, with nausea and vomiting. Bloody, fetid stools during typhoid fever, with great prostration. Cholera infantum, offensive brown stools, great restlessness, with painful dentition and complaint of pains in the gums.

FARADISM IN ATROPHIC RHINITIS.

BY IRVING TOWNSEND, M.D., NEW YORK CITY.

(Read at the Meeting of the National Society of Electro-Therapeutists, September 30, 1896.)

In a paper read before this Society, in 1895, by Dr. John B. Garrison, he strongly urged the employment of the faradic current as a useful adjunct to the treatment of atrophic rhinitis, and reported good results from its use in a few cases during the year preceding. He was only prepared to report *progress* in the treatment of his cases, as sufficient time had not elapsed to claim permanent cures. I had previously used this agent in two or three cases for a short time without any particular effect, and did not feel justified in urging the patients to continue the treatment with the uncertainty of achieving any permanent results. Becoming satisfied, however, that the use of the faradic current in these cases was based on sound principles, I resolved to continue its employment with the hope of better results. During the past two and half years I have treated fourteen cases for three months to one year, and have used the current in other cases, either at infrequent intervals or for a shorter time. In these latter it is not possible to say what effect was obtained.

The pathology of atrophic rhinitis is not a settled question. It was formerly considered as a later stage of the hypertrophic process. Bosworth considers it to be the result of purulent rhinitis of childhood. Some investigators, from recent research, claim to have isolated a specific bacillus peculiar to this disease, and, in view of this, assert it to be a specific disease due to infection. This latter theory is still unproved.

Whatever theory of its origin we may accept, it is very sure that it is characterized by certain retrograde tissue metamorphoses due to deficient nutrition of the nasal mucous membrane and underlying structures. This fact makes it certain that any means employed for its cure must be directed toward increasing the blood supply and improving the nutrition of the parts affected. It is for this purpose that faradism is used. Its use, however, does not supplant other measures but supplements them.

Certain diseases, as scrofula, syphilis, and tuberculosis, probably are predisposing causes. Anatomical peculiarities, as deflected septa and large nasal cavities, may favor its development. The diagnosis is easy, and the symptoms characteristic. The sequence of events in its development may be stated as follows: Diminished blood supply and activity of the muciparous glands; an abnormal secretion, deficient in the watery elements; dryness and retention of the secretions; atrophy of mucous membrane and submucous tissue; enlarged nasal cavities; formation of crusts and fetor. The prognosis is not good under ordinary methods of treatment, though in young subjects under favorable conditions a cure, or at least relief from distressing symptoms, may be obtained.

The number of cases treated is too few to enable me to speak authoritatively on this subject, but may serve to encourage us in persisting in the use of this agent as a help in the treatment of these cases. Of the fourteen cases treated eight only received treatment regularly two or three times a week; the other six cases were not regular in their attendance during a sufficient period of time to receive the full benefit of the treatment. Every case received, in addition to the electricity, a cleansing spray once or twice daily of Seiler's solution, or dilute boro-lyptol, followed by local applications of ichthyol, one part to eight of albolene, or eucalyptol and albolene 5 per cent. solution.

The current was applied by means of a steel electrode covered with a layer of absorbent cotton at first, and later with a platinum electrode, flattened, and about one and one-half inches in length, and covered with the same material, inserted into the nasal cavity; and the other electrode, a sponge-covered disk, applied to the forehead. Mild currents were used, the sensations of the patient serving as a guide, and when any discomfort was felt the strength of the current was reduced to a point of comfortable toleration. The duration of treatment lasted from three to ten minutes, during which the intra-nasal electrode was applied as far as possible to the whole surface of the mucous membrane. The immediate result was to produce a flow of watery mucus and a relief of the sensation of dryness which causes so much discomfort to the patient. This stimulant effect lasts for several hours, but by the second day the

dryness again becomes noticeable and another treatment is required.

Daily treatment is best whenever possible at the beginning, or at least on alternate days it should be insisted upon for the first month. After this, two or three treatments a week will usually suffice, and, as the case progresses, the intervals may be lengthened. The degree of atrophy existing must serve as a guide to the duration of treatment, and in this respect every case is a law unto itself. In mild cases, six months may be enough to establish a cure, and in other cases the treatment should be persisted in for a year or longer. It is wise to advise the patient at the beginning of the treatment of the nature of the disease and the length of time that will be required to accomplish satisfactory results, so that he may not be disappointed and give up treatment before any material progress has been made. Only such cases as are willing to undergo treatment for a prolonged period are worthy of a serious attempt at a cure.

In every case where faradism has been employed for three months or longer, I have seen beneficial results from its use, and in four of the cases treated the improvement has been such that I feel justified in considering them cured, both from the relief of symptoms and the appearance of the nose on examination. The other four cases who were faithful in carrying out the treatment are much improved, and suffer little or no inconvenience at the present time. In these patients the nasal mucous membrane is in a fairly healthy condition, though the submucous tissue has not been, to any extent, reformed, and the cavities are so large that it is reasonable to expect a recurrence of the trouble if treatment be discontinued. The other six cases have received some benefit from the treatment, and four of these report occasionally for treatment when the symptoms become troublesome.

While the beneficial effects of faradism in these cases have been such as to justify its continued use, it is only proper to state that its efficiency probably depends wholly on its stimulating properties. The muciparous glands that have been destroyed in the sclerotic process cannot be restored to functional activity, nor can the epithelium that has degenerated from the columnar ciliated to the squamous variety be reconstructed.

In using the term "cure," it should be understood as the restoration of the mucous membrane to its functional activity and the subsidence of all distressing symptoms, and not the regeneration of any tissue that has been entirely destroyed by the atrophic process. This latter result is not to be expected from any kind of treatment, hence, the word should be used in a restricted sense to signify a disappearance of symptoms, and not the complete restoration of all the tissues involved to a perfectly normal histological structure. This is precisely the basis on which "cures" of all chronic diseases are estimated, and I offer no apology for the use of the word.

I regret that my report includes such a limited number of cases, but every rhinologist knows the difficulty of persuading these patients to undertake and continue a prolonged course of treatment, with the uncertain hope of permanent good results. It is my opinion that faradism is a most useful aid in the treatment of atrophic rhinitis, and I hope that future results obtained from its use by others will verify my own experience.

FRACTURES INVOLVING THE ELBOW-JOINT.

BY WALTER STRONG, M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania,
September 30, 1896.)

It is with a certain degree of hesitancy that I presume to occupy your time and attention by the discussion of a subject which may seem so commonplace in these days, when the surgeon's pen is expected to bring forth something decidedly startling, or the report of some new and heretofore unheard-of operation. Unfortunately, I have nothing of such an interesting character to offer you, but hope that you will be kindly indulgent with me for a few moments while I call your attention to certain mooted points in the management of fractures involving the elbow-joint.

Of all fractures met with in surgical practice there is probably no one so liable to complications, both surgical and legal, as a fracture occurring in close proximity to the elbow-joint. The professional risks which are inseparable from the management of these injuries inspired the pen of one of our most eminent surgeons (Gross) when he wrote that he knew of no fracture which he approached with more doubt and misgiving than that of the lower end of the humerus.

A wide diversity of opinion has long existed among surgeons of prominence regarding the most promising mode of treating these fractures, not only as to the position of the arm, whether flexed or extended, but also as to the advisability of employing early passive motion to the joint.

These and other disputed points regarding the treatment, together with the frequency of the accident and the necessity of maintaining the functional integrity of the joint, make this subject an interesting one to not only the surgeon, but also to the general practitioner, who is not unfrequently called upon to treat these cases.

If an enumeration be made of all the fractures occurring in the region of the elbow, we would find that in more than ninety per cent. of the cases the osseous lesion would involve the condyles of the humerus, and that of these fractures of the humerus, fractures of the internal and external condyles taken together would constitute nearly three-fourths of all (Stimson), while the remaining fourth would comprise the supra-condylar, the inter-condyloid, and T-fractures.

We would also discover that fractures of the internal and external condyles were of about equal frequency, and that the same ratio exists between supra-condylar and inter-condyloid fractures; we would also find that the vast majority of these fractures occur in children between the ages of five years and puberty (Lane), and that they are comparatively rare after the age of forty (Brun).

It is not my intention in this paper to enter into a detailed description of all the special fractures occurring in this region, but to occupy the limited time at our disposal with a discussion of the causes leading to ankylosis in these cases, and the means by which such unfavorable results may be most surely avoided.

When it is remembered that the elbow-joint is the centre of

sextuple action, over which pass, are inserted into, or arise from, six separate sets of muscles, which are concerned in the flexion and extension of the forearm, and of the fingers and hand, as well as the pronation and supination of the hand and wrist, we may perceive and better appreciate the disastrous consequences which may attend a lesion disturbing its integrity.

The frequency with which limitation of motion follows these fractures cannot be established by statistics, having been unable to discover any reliable statistics bearing upon this point. Nearly all of these cases are treated in dispensaries, and the ultimate result seldom forms part of the record. In those cases where the result is mentioned, it is usually described as being "perfect," or "good," and only rarely as "poor."

That fractures occurring in the region of the elbow-joint are especially liable to be followed by more or less limitation of motion, is a fact beyond the possibility of a doubt. This fact is very forcibly impressed upon us in looking over the literature upon this subject, where we find, that while there is a great diversity of opinion regarding the treatment, all authorities agree that the prognosis should be guarded.

Astley Cooper tells us, that while, in the majority of the cases, fair use of the limb will result, a guarded prognosis should be given, as ankylosis frequently occurs, regardless of the skill and attention bestowed.

Gross tells us, that even in the simpler forms of these fractures, when the treatment is skilfully conducted, there is great danger of unfavorable results.

Bryant says that fractures of the condyles of the humerus into the joint are always followed by ankylosis.

Hamilton, in his well-known work on this subject, advises a guarded prognosis in all cases.

Packard says that the course and results in these fractures are liable to be very bad, and advises a guarded prognosis.

Boyer, Dupuytren, Desault, Fano, Larrey, Chassaignac, and others, in writing upon this subject, express themselves in a similar tenor.

Permanent limitation of motion at the elbow following these fractures is commonly due to one of three conditions: 1. A change in the shape of the articular surfaces of the humerus. 2. An overgrowth of bone upon the surfaces of the humerus.

3. An ossification of the capsule and ligaments, each of which we will consider more fully, and endeavor to determine the causes leading to the development of these pathological conditions.

The normal range of motion at the elbow between flexion and extension lies between 35° and 172° (Masse). Over this large joint surface the bones composing the elbow are in close and accurate contact with each other. It naturally follows that a comparatively slight change in the shape of these bones will cause a marked disturbance in the function of the joint. Such a condition is one that can only be partially relieved by a gradual yielding of the ligaments or by the absorption of the bone under the influence of long-continued pressure.

An overgrowth of bone upon the surfaces of the humerus is frequently a cause of limitation of motion in these fractures. This overgrowth is in part exuberant callus and in part new bone, and may occur directly at the seat of fracture or under the periosteum near the fracture. This is a condition quite frequently found following these fractures, due, to a large extent, to the fact that these fractures are usually found in quite young persons, in which there is a greater activity of the elements that participate in the reparative process and frequently lead to a hyperplasia of the bone. This is also more likely to take place where there has been great displacement of the fragments or where the fracture has not been well reduced.

A thickening of the ligaments and surrounding tissues of the joint by the products of inflammation is a very common condition observed after these fractures, and may cause temporary or permanent limitation of motion at the elbow. These fractures are always attended with more or less injury to the soft parts, and in many cases this injury to the soft parts is of such a serious nature as to lead to marked pathological changes in the adjacent tissues. As a temporary condition the anatomical changes are limited to an exudate which infiltrates the surrounding tissues, and which promptly and completely disappears after the repair of the main injury and the cessation of irritation. As a permanent condition we find that the changes are of a far more serious and extensive character. Here we find that a tearing of the soft parts has resulted in the development of considerable cicatricial tissue, which binds together

the various parts of the joint, also that there has been more or less destruction of the synovial membrane of the joint, together with a thickening of the capsule. If the inflammation has been severe and long-continued we may find that this new and thickened tissue has become more or less ossified, and that we have a joint completely and permanently ankylosed.

We will now briefly consider those points in the treatment of these fractures which have a material bearing upon the development of the three conditions just mentioned.

The importance of an early and accurate diagnosis in these cases is so apparent that very little argument is necessary upon this point. Without a knowledge of the exact location and character of the osseous lesion we cannot adopt those measures best suited to that particular case. We now have at our disposal a most accurate method of diagnosing these cases. I refer to the use of the Roentgen or X-rays, by means of which we are enabled to see at exactly what point the fracture exists, as well as its relationship to the surrounding bones. At the present time I simply call your attention to this means of diagnosis, and will speak more fully of its use in a future communication.

Considerable diversity of opinion has always existed among surgeons as to the most favorable position for the arm in treating these fractures. At present we find surgeons about equally but hopelessly divided between the flexed and extended positions. So much has been written regarding the respective merits of these positions that very little remains to be said.

Personally, I am not wedded to any particular position in the treatment of these fractures, although I am free to admit that I favor the flexed position. My sole reason for favoring the flexed position is the fact that I have succeeded in treating thirty-three cases of fracture in the region of the elbow with results satisfactory to myself as well as to my patients.

But I am not narrow-minded enough to say that all cases should be treated in this position, nor that as good results cannot be obtained with the extended position. Were I to meet with a case where complete reduction could not be maintained with the arm in the flexed position, I would not hesitate to treat such a case in the extended position.

Some of the more enthusiastic advocates of the extended position claim that it is impossible to treat these cases in the

flexed position without a loss of the outward angularity of the forearm upon the arm, or that we will lose the carrying power of the arm. This I do not think is warranted by the facts of the case, for there is nothing in the flexed position to interfere with this relation of the radius and ulna to the humerus, and even if there be a slight degree of cubitus varus present I do not think it a serious objection so long as it be not excessive.

Unfortunately we have no statistics showing the respective results of the flexed and extended positions, apparently as many cases of ankylosis occur under the extended position as with the flexed. We do know that ankylosis frequently occurs with both positions, also that an upper extremity, with a stiff elbow-joint, having the arm in the extended position, would be the source of much disability and the cause of much discomfort, while the same condition, with the arm in the flexed position, would be very useful in many ways to the patient.

Smith, of Boston, has recently reported a series of thirty cases of these fractures successfully treated with the arm acutely flexed, and claims that the range of motion was greater and the deformity less than in any other position. Warren, McGraw, and a few other surgeons also favor this position.

It might be of interest to know how some of the more prominent surgeons of to-day treat these fractures.

Among those favoring the extended position may be mentioned Allis, Roberts, Willard (of Philadelphia), Dennis, Gers-ter (New York), Fowler (Brooklyn), Park (Buffalo), Senn (Chicago), Lane (San Francisco).

Among those using the flexed position we find Bryant, Harrison, Horsley (of London), Czerny (Heidelberg), Abbe, Sayre, Stimson (New York), Keen, White, Morton, Ashurst, Packard, Deaver (Philadelphia).

Another very important point in the treatment of these fractures which is in dispute, is that of passive motion. Upon this point surgeons hold widely divergent views, some claiming that persistent and early passive motion is the only safeguard against ankylosis, while others believe it favors ankylosis, and in many cases it is the sole cause.

To my mind this is the most important point in the management of these fractures, and that more harm arises from the early use of passive motion than from all other causes put to-

gether. Stimson put it very ably when he said that "the ankylophobia of the surgeon is more dangerous than the traumatism."

The pernicious advice of Hamilton urging early passive motion in elbow fractures is probably responsible for many stiff joints following these fractures. Concerning which he says, "At a very early date, so early, indeed, as the seventh or eighth day, the splint should be removed, and while the fragments are steadied the joint should be subjected to gentle passive motion, and should be repeated as often as every second or third day, in order to prevent, as far as possible, ankylosis." So many surgeons have blindly followed this advice it is not surprising that we meet with so many cases of ankylosis, the result of these fractures.

The advocates of early passive motion base their belief on the fact that if a joint is kept movable it will not become stiff, and partly from the clinical observation that many joints that have been treated by passive motion have regained their function. They claim that no delay is permissible; a week, ten days, or a fortnight at the latest, after the injury we must begin our passive motions. Since the object of this passive motion is to stretch or break the bands which are forming within the joint, the movements must necessarily be carried beyond the points where resistance begins.

The patient endeavors to stand these painful manipulations as best he can, but in spite of his fortitude his muscles involuntarily contract and make the range of easy motion less and less. At the next attempt we find the range of motion somewhat less, the manipulations more painful, and also that the joint is more or less swollen. These conditions become more pronounced after each attempt at passive motion, until finally the patient refuses to allow the movements to continue or the surgeon recognizes the onset of acute inflammatory symptoms. The surgeon then waits a few days, perhaps, then, under ether, "breaks it up," but again it stiffens and he is compelled to give up the struggle. After the swelling and soreness disappear we have one of two results: the joint either remains permanently stiff or gradually regains its function under the natural use of the limb.

Phelps, at Loomis laboratory, New York, recently conducted

a series of experiments upon the lower animals, with a view of determining the cause of ankylosis. Those experiments proved conclusively that ankylosis was not due to immobilization. The conclusions which he arrived at were: 1. That a normal joint will not become ankylosed by simply immobilizing it for over five months. 2. That motion is not necessary to preserve the normal histological character of a joint. 3. That when a healthy joint becomes ankylosed it is not due to prolonged rest, but to pathological causes.

If these experiments prove that ankylosis is not due to prolonged fixation, and that motion is not essential for the preservation of the normal function of a joint, then ankylosis must depend upon pathological changes in the joint. In which case, how can passive motion be of use in these fractures?

In all fractures about the elbow-joint we have more or less injury to the soft parts. This injury consists in a laceration and contusion of the tissues surrounding the joint, also a tearing of the ligaments, as well as peeling off of the periosteum at the seat of fracture. Following the injury, we have an inflammation set up in all the tissues surrounding the joint, as well as an acute synovitis in the joint itself.

How shall we treat such a condition of affairs as I have just described? Were it not for the osseous lesion which exists, all would agree in advising complete and absolute rest to the injured parts. We would adopt those measures which we would employ in an inflamed condition in any other portion of the body. But on account of the existing fracture many insist that we shall in a large measure dispense with our best antiphlogistic measures which we employ in all other inflamed conditions, and adopt an entirely different plan of treatment. According to their mistaken idea we must carefully reduce the fragments, apply such a dressing as will retain the fragments in place, and put the limb at rest. But this period of rest must not continue longer than a week, at the end of which time we find that the symptoms of inflammation have subsided and everything is doing well. We must now commence our passive motion, which means that we must break up all the union which has already taken place in the tissues. We again start up our inflammatory action, and possibly by our meddlesome manipulations excite an overgrowth of callus, which is one of the things

which we desire to guard against. With such treatment it is nothing short of a miracle that any of these cases recover the function of the joint.

Now let us take a look at the opposite side. We carefully reduce our fracture and apply suitable dressing, our inflammatory symptoms subside, and we simply change our dressings so as to keep them snug and our patient comfortable. Having been sure that our fragments were properly reduced at the start, we are not at all inquisitive, but perfectly willing that nature shall take its course. At the end of four weeks we finally remove our dressings, and perhaps discover some slight stiffness, which, if not due to a change in the shape of the articular surfaces of the bone, will gradually disappear with the natural use of the arm.

Compound fractures involving the elbow-joint are always very serious accidents, and usually followed by complete ankylosis. Such being the case, all such fractures should be treated with the arm in the flexed position, so that if ankylosis does occur we have the arm in the most useful position for the patient. Ankylosis, however, does not always follow these fractures. About eighteen months ago I had under my care at the Women's Homœopathic Hospital, one of the most serious compound fractures of the elbow which I ever met, in which a most favorable result was obtained. Patient was a boy who was hit by an express train. Among other very serious injuries was a compound, comminuted fracture of the condyles of the humerus, in which there was extensive laceration of the tissues and laceration of the vessels. Under ether I enlarged the openings and found bone ground into quite small fragments, and although I had permission to amputate, decided to endeavor to save the limb; after removing the loose fragments, which consisted of the entire condyles, and after controlling the hæmorrhage, I applied the usual dressings under aseptic precautions, and placed the arm in the flexed position for seven weeks, at the end of which time I removed the dressings, and, much to my surprise, found quite a little motion present. This range of motion has gradually increased under the natural use of the arm, until at present he has a very useful arm, with a range of motion amounting to over ninety degrees.

Another very interesting case which recently came under

my care was one in which an injury to the ulnar nerve was the cause of limitation of motion at the elbow. The case was that of a man about thirty, who six months before had had a severe crush at the elbow resulting in a fracture, as well as I could determine, through the condyles. Following the fracture, which apparently had united without any complications, the patient experienced considerable pain in the region of the elbow upon the slightest attempt at motion; the hand was almost useless. I advised that he submit to an exploratory incision, to which he consented; at the operation I found the ulnar nerve closely bound down to a mass of new bone. I carefully liberated the nerve from its new attachment and sewed up the wound; there was almost immediate cessation of pain, and since there has been a slow but gradual return of the function of the limb.

LATENT GASTRIC ULCERS.—Prof. Dieulafoy was called to a young chambermaid who, previously healthy and without preceding dyspeptic symptoms, suddenly one day after dinner was taken with violent pain in the epigastrium; the next morning the pain was less, but felt over the whole abdomen. The abdominal walls were rigid and very sensitive. Her pulse was rapid, but her general condition was good and without hiccough or vomiting. General peritonitis was diagnosed and a cœliotomy done twenty hours after the first appearance of the pain, and an acute peritonitis found. Death followed the next morning. At the necropsy, between the pyloric and cardiac extremities, and 1 cm. below the lesser curvature, a perforated simple ulcer, without adhesions, was discovered; exactly opposite to this one, on the posterior surface of the stomach, a similar ulcer was observed, with slight adhesions between it and the pancreas; both were of the size of a five-cent piece. These ulcers had been free from pain and practically undetected on account of their being situated so high that the food would not come in contact with them except that the stomach be very full. Patients with ulcers on the anterior wall experience relief on lying on their backs. How may one diagnose a perforative peritonitis from such an ulcer? Dieulafoy mentions certain features: (1) "The sudden and violent onset; (2) the violence of the pains and their being felt in the epigastrium; (3) tension of the upper part of the abdomen; and (4) absence of nausea and vomiting.—*Norsk Magazin for Lægevidenskaben*, No. 10, 1896. [Osler (*Ibid.*) refers to latent ulcers with entire absence of symptoms, and revealed as open ulcers or cicatrices at the necropsy. Goodno (*Practice of Medicine*, vol. ii., p. 562) states the symptomatic range in gastric ulcer to be wide. Cases are known in which not the slightest clinical evidence of ulceration exists, the ulcer being discovered after death from some other disease. . . . "Some cases progress so insidiously that perforation affords the first evidence of danger."—F. H. P.]

EDITORIAL.

WM. H. BIGLER, A.M., M.D.

WM. W. VAN BAUN, M.D.

THE PRINCIPLE OF THE THING.

ALTHOUGH the general usefulness of State Boards of Health cannot be denied, the fact cannot be gainsaid that in many instances they have exceeded the powers intended to be conferred by their creation, and that some of the acts passed in their behalf might fittingly be entitled "Acts Tending to Build Up a State Medicine and to Suppress the Private Practitioner."

When, then, we meet with an utterance by such a body which gives evidence of a "realizing sense" of one of its main functions, viz., the instruction of the people in things hygienic and the rescuing them from the power of irresponsible treatment, we hail the event with joy.

Such occasion for rejoicing we found in the following extract from a circular recently issued by the New Mexico Board of Health on the dangers of indiscriminate spitting, especially in consumption :

"About the house there is no better way than to spit between the leaves of patent-medicine almanacs, to be had freely at all drug stores, and after half a dozen or more spittings, burn the book."

Our joy rises to enthusiasm at the artistic manner in which a great truth is thus brought home to the dullest comprehension. It is truly a work of art, and will bear closer examination and analysis. With what candor it acknowledges the lavish generosity of the publishers of these almanacs! How gently it indirectly alludes to the habit, so universal among invalids, of gravitating to the drug stores in a general aimless way, in their search for some panacea! With what guilelessness it admits the interesting character of this literature, and urges them to take a good supply of it with them to their homes to wile away the tedious hours of their slow-moving days! It willingly accords them time for its perusal, and that with no niggardly hand—half a dozen or more spits—which will occupy more or less time, according to the condition of the

patient. Just here we recognize the hand of true genius. The author knows full well that the invalid will be compelled to spit, and he says by implication, with a wisdom worthy of the original serpent, "Don't bother with cuspidors, spit-cups and such truck (he is addressing Westerners), but use the things in hand; you have plenty of them; it will save much trouble; spit into them." However innocently and unconsciously the invalid has followed the first part of his advice, he knows that he will shortly, perhaps before his half a dozen or more spittings, be willing to follow the rest and burn the almanacs. He will quite unwittingly have lost respect for them and their contents. How can a man retain respect for that upon which he has spit half a dozen or more times? Had the word "expectorate" been employed one could imagine that some spark of confidence or respect might have lingered in the breast, but the author of the advice knows human nature too well; he wrote "spit" and he meant "spit," with all which that word implies, especially in the case of consumptives. He is sure of his ground. He knows that no one could use himself, or suffer any of his friends to use, with confidence or satisfaction, a remedy compounded or advised by one into whose face, if only a rude wood-cut of the same, he had spit half a dozen or more times. Again, we repeat, the author of that circular displayed genius of a high order, and we commend the action of the New Mexico Board of Health in disseminating it, and would suggest that the underlying principle which prompted it be adopted a little more generally by other boards of health. In this connection we would mention—shall we say in contrast?—the action of our own Board in pursuance of Act No. 263, entitled "An Act for the Prevention of Blindness," etc. We draw our information from a paper most aptly called "State Medicine in Pennsylvania," by Benj. Lee, M.D., secretary of the Board.

In 1892 the Board adopted a regulation requiring anyone not a legally qualified practitioner of medicine, noticing inflammation of the eye or redness of the lids in a new-born child under his or her care, to report the same to some legally-qualified practitioner of medicine within twelve hours of the time the disease was first observed. Although this regulation had some impracticable points about it, as we pointed out, it at least recognized the existence of physicians and the necessity

for skilled treatment by fully competent individuals. This regulation has now, however, been superseded by the act under consideration, which requires the nurse or midwife to report to the health officer within six hours after discovery of the symptoms of the disease, when that officer shall at once "*send directions for the treatment of the case.*" (The italics are ours.)

In pursuance of the purpose of the act, which is, be it remembered, the prevention of blindness, the Board has issued a form "as a guide to health officers in the discharge of the duty assigned them," but which is evidently to be a guide to the nurse or midwife in the treatment of the case. It refers to the act, to the danger of loss of sight from the disease, and then gives "directions to the nurse or midwife" as to (1) washing the eyes, (2) dropping in a solution of nitrate of silver, and (3) further washing with a warm salt-water solution, or a solution of boric acid. Then, after emphasizing the great danger of infection, it gives an "Official Prescription, authorized by the Board of Health." We would like to know at whose instance such an act as the one referred to was passed.

An errant flatus may not be treated "for pay" by anyone who has not studied four years in a medical college "in good standing," and proved his fitness to practice medicine and surgery by undergoing an examination at the hands of the Examining Board, and yet here we have a disease, the dangers of which are well known and which have been again forcibly pointed out by a host of statistics in Dr. Lee's paper, *legally entrusted* to unqualified persons. Does anyone acquainted with the disease and the infinite care required in its treatment think that an act which results in putting it into the hands of midwives and nurses, even with the excellent and pertinent, but necessarily limited directions furnished by the Board, can truthfully be entitled An Act to Prevent Blindness?

Why does not the Board issue these directions as only applicable to the emergency, and then insist either upon the health officer himself taking charge of the case, which is the only logical and legitimate outcome of their interference at all in the matter, or upon the employment of some duly qualified physician by the family? One or other of these courses would be carrying out the principle animating the Board of Health of New Mexico.

A TREE IS KNOWN BY ITS FRUIT.

SOME of our readers will no doubt remember the pronouncement issued by the Missouri Board of Health requiring all medical colleges wishing to be "in good standing" with it to furnish a list of their respective matriculants, together with the basis of their matriculation, against which the dean of the Hahnemann College of Philadelphia uttered so forcible a protest.

A test case was made by a graduate of the Physio-Medical School of Indianapolis, who, in July, 1896, appeared before the Board, presented his diploma, offered the fee of one dollar, which the statute allowed for registration, and applied for a license to practice medicine in Missouri. The license was refused upon the ground that the college was "not a medical institution in good standing." The Board offered to examine the graduate. He refused, and applied to the Supreme Court for a writ of mandamus, which was granted.

The name of the college appears in the list of the Illinois Board of Health, which is "considered standard in the United States."

In its decision the Supreme Court said that in undertaking to establish a rule of its own by which "good standing" should be shown, the Board went beyond the power conferred upon it by the statute from which it derived its origin and by which its duties and authority are defined. "As relator had a diploma from a medical college in 'good standing' he was under no obligation to submit to an examination by the Board, nor had it any authority to demand it as a prerequisite to granting him a certificate to practice medicine in the State."

The same principle holds good, we think, in regard to the demand of the Board of Medical Examiners in Pennsylvania for an examination into the fitness to study medicine, as a prerequisite to the granting an examination to a graduate of a medical school in "good standing." It is certainly acting *ultra vires*, and is assuming an authority not granted in the statute whereby it was created, as we pointed out some time ago.

We feel confident that all who desire the elevation of the standard of the medical profession by legitimate means and as a healthy and permanent growth from within, and not as a sort

of in-God-we-trust-on-our-coppers Christianity, will rejoice at this decision as an evidence that the law, in some places at least, recognizes certain rights of individual physicians and colleges which even boards of health and medical examiners are bound to respect.

Examine, gentlemen, since such is your will, and as carefully and as thoroughly as may be, but only the finished product, and only upon it stamp your royal approval. With the raw material you have nothing to do, nor with the process of manufacture. If from an examination made as severe as you desire you cannot discover whether an applicant for a license to practice medicine and surgery is fit to do so (your sole duty), without being first informed how much preliminary education he has had, how long he has listened to lectures and in what medical school, then God help you and him and us all in our endeavor to raise the standard of the profession.

By their fruits ye shall know them.

THE ANN ARBOR SITUATION.

SINCE the appearance of an editorial in the March, 1897, *HAHNEMANNIAN MONTHLY* on "The Situation at Ann Arbor," we have been favored with many letters from those representing the Regents' side of the Ann Arbor controversy, which is, to retain the Homœopathic Medical Department of the University of Michigan at Ann Arbor at any cost, and, judging them by their past record, to disintegrate and destroy the school later. Among these letters are two from members of the present Faculty at Ann Arbor—one is written in a gentlemanly spirit by a gentleman long a resident of the State of Michigan, while the other is not. Both letters attack the statistics presented in the editorial, but make no reference to the essential principles governing the removal question. Both dwell upon and magnify the following these gentlemen, by various representations or misrepresentations, have been able to gather around the Regents, and both claim a change of heart on the part of the Regents towards the homœopathic department.

Personally, we have no interest in "the sides" of the question, and we plead guilty to an interest in the possible momen-

tous outcome upon the future of homœopathy in the northwest in the final settlement of the question.

It is due these gentlemen of the homœopathic profession, who are so active in the interests of the Regents, to presume that their intentions are honest. At the same time we are compelled to recognize that their positions are dependent upon the favor of the Regents and not upon that of the homœopathic profession of Michigan, and that they are voicing the sentiments of the Regents and not of the profession.

We are ready to admit that the Regents are at least manifesting some disposition to deal fairly with the homœopathic department at present. This fact, however, should not be attributed to any change of the Regents' feeling towards the homœopathic department, but rather to the fact that the Regents are now under fire, and that more vital interests, to them, are at stake (a tying up of the entire University appropriation), with a legislature in session bent on seeing fair play granted to the homœopathic department, and to a natural desire not to furnish the homœopathic profession additional leverage upon public opinion and the State authorities. With the danger of removal past, it is but fair to infer that the Regents will return to their temporarily-abandoned plans for destroying the homœopathic department.

Granting that Ann Arbor has 12,000 inhabitants instead of 4000; that there are only 60 physicians instead of 100 in Detroit; that 60 per cent. of the members of the late legislature have retired; that 95 per cent. of the homœopathic profession do not favor removal to Detroit, as they should do; that the Detroit profession is actuated in their desire for the removal of the college from Ann Arbor to Detroit by selfish motives, etc.; and granting, further, anything else these advocates of the Regents' opposition to removal may claim, the two fundamental facts upon which we base our advocacy for removal remain fixed and unalterable; for Ann Arbor still remains a *village*, and any medical mind retaining sufficient mentality to think honestly for itself, and possessing but a rudimentary knowledge of the requirements of medical education to-day, knows that a village is *not* the place to try to develop a successful medical school. Secondly, everyone of similar capacity knows that the able profession of Detroit, upheld by a loyal Michigan senti-

ment, can build, equip and maintain at Detroit a first-class homœopathic medical department of the University of Michigan, and that the Grace Hospital can be obtained for proper teaching purposes.

The Faculty at Ann Arbor seems to be bent upon creating dissensions in the ranks of the Michigan profession. This is unfortunate, if nothing else, for this is not the time for division in our councils in Michigan. The profession should get together, and we are convinced that there would be but little difficulty if the Faculty were as loyal to homœopathy as they are to the desires and wishes of the Regents. We can see no reason why the four permanent professors now at Ann Arbor cannot take up their abode at Detroit; none of them have resided at Ann Arbor more than a few months. If they are capable men their services will be needed at Detroit, and if they are not they should certainly not be retained, either at Detroit or Ann Arbor.

We trust that the vast majority of the homœopathic profession of Michigan can find some honorable basis for getting together in favor of removal. We feel that they can; and if, at present, there are only ten men in the State who recognize the superior advantages of a city location, commanding, as it does, great clinical supplies for a college, they have but to take courage and make an able, aggressive campaign, and they will soon have a practically united profession approving the plan for the removal of the Homœopathic Department of the University of Michigan from Ann Arbor to Detroit, and with removal will come increased numbers, prestige and influence for homœopathy.

The homœopathic profession expects its members in Michigan to do their duty to homœopathy.

COITUS RESERVATUS AS A CAUSE OF NEURASTHENIA.—Prof. von Tschisch has recently observed 17 cases of neurasthenia—11 males and 6 females—who, not predisposed by heredity, presented no other cause of neurasthenia except coitus reservatus. They were characterized by a *groundless anxiety and a painful apathy for their surroundings*. The neurasthenia was only of moderate degree. Also in 36 other cases where this was *one* of the causes *this groundless anxiety* was noticed. He advised sexual abstinence for two to four months and giving up of the habit of withdrawal. The outlook is good if they will obey.—*Hospitalstidende*, No. 30, 1896.

GLEANINGS.

NERVOUS SYMPTOMS IN LIVER DISEASES.—Dr. Léopold Lévi (Paris), though admitting that many nervous symptoms in hepatic affections may be due to a synchronously existing renal disease, cachexia, inanition, as well as to a common cause, as alcoholism, yet states that there are symptoms which are dependent directly upon the pathological alteration primarily—a hepatotoxæmia which in certain ways greatly resembles a nephrotoxæmia (uræmia).

Hepatic Coma.—It may be either transitory or terminal. The transitory variety has been observed in atrophic cirrhosis with ascites, and, though the coma was deep, the patient recovered consciousness. The terminal form is liable to be associated with renal incompetency as well. Thus the writer has observed a patient with alcoholic cirrhosis who had transitory delirium and coma with mydriasis and paralysis of the facial nerve. There was at the same time slight albuminuria, but no icterus. In certain cases of icterus gravis the nervous disturbances must be regarded as of hepatic origin; but the cerebral phenomena are generally due to the grave general infection. Hepatogenous coma is generally complete, sometimes accompanied by paralysis or contracture, at times by epileptoid spasms. The respiration is generally slowed, while the heart's action is rapid, contrary to icteric bradycardia. Characteristic of hepatic coma is *mydriasis* (in uræmic coma myosis is the rule) and *urobilinuria*. This latter sign is as characteristic for hepatic coma as glycosuria is for the diabetic or albuminuria is for the uræmic forms of coma.

Hepatic Delirium.—The writer has seen several examples of transitory delirium in liver diseases where other causes (inanition) could be excluded. This form of delirium is generally quiet, and is distinguished by incoherence in speech and action, with a demented and childish tendency. Many writers speak of a “*folie hépatique*,” and regard melancholia and hypochondria as due to liver disturbances.

Hepatic Spasms.—These may be either transitory or terminal, isolated or general. Most frequently they appear as a fatal eclampsia in small children and as a curable epilepsy in older patients. They belong to the grave accompaniments of hepatic diseases.

Hepatic Tremor.—The writer has observed repeated attacks of tremor in a patient with atrophic cirrhosis who was neither a spirit drinker nor affected with a renal disease. The same patient later had delirious attacks and finally coma and facial paralysis. The case ended fatally.

These symptoms are the more serious ones; but there is a series of minor nervous symptoms of hepatic origin, as: alteration of character, muscular asthenia, disorders of sleep, somnolence, disturbances of sensation, disorders of the reflexes, eye affections, etc.—*Hospitalstidende*, No. 40, 1896. [I had a case of cancer of the liver, with a great degree of icterus, who had a terminal hepatic delirium with confusion of ideas, lack of knowledge of place and a desire to wander about and escape. He was easily controlled. The delirium was only transitory and came on especially at night. I now have another

case of cancer of the left lobe of the liver who has a confused idea of time with a slowness of mental processes.—F. H. P.]

EHRlich's TEST IN TYPHOID FEVER.—Dr. Dolgow (Kieff), at the recent Congress of Russian Physicians, stated that he had tried Ehrlich's test in 133 cases of typhoid fever, and had never seen it to fail. He would regard it diagnostically as of as much importance as the characteristic temperature curve, the roseola, and the increase in size of the spleen. In cases which are to pursue a favorable course the reaction is faint, disappearing towards the end of the second week, it preceding the fall of the temperature. If the coloration be intense, and with no tendency to disappear, then the case will be severe and the issue uncertain. Its intensity generally runs parallel with that of the temperature, slightly preceding it. Though not absolutely characteristic of typhoid, it is not met with in malaria nor various forms of gastritis, but, unfortunately, it is noticed in tubercular affections which are approaching suppuration, as well as in pneumonia and pleuritis. Here, however, it is only where the case assumes a grave form and a different picture than that of typhoid fever.

There are two solutions: Sol. A, sodium nitrite, 1.0; HCL, 10 c.cms.; aqua, 200 c.cms. Sol. B, sodium nitrite, 0.50; aqua, 100 c.cms. Take 10 c.cms. of Sol. A, add 5 to 6 drops of Sol. B, neutralize with a few drops of aqua ammoniæ and mix it with 5 c.cms. of urine.—*Revista Clinica E Terapeutica*, No. 7, 1896. [Prof. Osler, *Practice of Medicine*, p. 26, describes this so-called diazo-reaction somewhat differently: "Two solutions are employed, kept in separate bottles, one containing a saturated solution of sulphanilic acid in a solution of HCL (50 c.cms. to 1000 c.cms. of water), the other a $\frac{1}{2}$ per cent. solution of sodium nitrite. To make the test a few c.cms. of urine are placed in a small test-tube, with an equal quantity of a mixture of solution of the sulphanilic acid (40 c.cms.) and the sodium nitrite (1 c.cm.), the whole being thoroughly shaken. One c.cm. of ammonia is then allowed to flow carefully down the side of the tube, forming a colorless zone above the yellow urine, and at the junction of the two a deep brownish-red ring will be seen if the reaction is present. With normal urine a lighter brownish-red ring is produced, without a shade of red. The color of the foam of the mixed urine and the reagent, and the tint they produce when largely diluted with water, are characteristic, being in both cases of a delicate rose-red if the diazo-reaction be present, but if not, brownish-yellow. . . . The value of the test is lessened by its occurrence in cases of miliary tuberculosis, and occasionally in the acute febrile diseases associated with high fever."—F. H. P.]

FRANK H. PRITCHARD, M.D.

A NEW CLASSIFICATION OF EPILEPSY.—In the third annual report of the Board of Managers of the Craig Colony for Epileptics, the President, Dr. Frederick Petersen, has this to say regarding the classification of this disease:

So little is known of the ætiology and pathology of epilepsy, that it is not possible, in the light of present knowledge, to make a classification of its forms. The terms grand mal, petit mal, psychic and Jacksonian, are largely symptomatic designations, and bear little relation to causative factors. A classification based strictly on ætiology is not possible, but none will deny that such a classification would be more scientific and valuable. In the subjoined classification we have omitted the use of the term idiopathic, believing that a

more specific disposition might be made of cases likely to be classed by placing them, after closer study, under some less indefinite heading. The classification here offered is not held to be perfect or even satisfactory, but is used as a working basis for future improvement.

Genito-Neuropathic.—Embracing types in which various nervous diseases, insanity, feeble-mindedness, inebriety and degenerative types of families of low moral and mental development are found in patient's family history.

Post-Paralytic.—Embracing types in which the disease follows infantile or post-developmental paralysis.

Traumatic.—Including cases in which the indenture of the calvarium is manifest, or in which trauma acted more forcibly than a slight determinant to an existing predisposition.

Hystero-Epilepsy.—Including all cases in which hysterical convulsions precede, are concomitant with, or follow a true epileptic seizure. In some cases of this class hysterical convulsions may alternate with true epileptic seizure.

Hereditary.—Embracing all cases in which the disease can be directly traced in the immediate family history.

Imbecilic.—Including cases in which imbecility, or lack of mental development precedes, is concomitant with, or is a sequel to the epilepsy.

Acquired.—Including all cases in which the disease has for its ætiology such deleterious habits, unhygienic surroundings, or toxic states of the organism as would cause the disease to appear without a congenital predisposition existing.

Senile.—Embracing all cases in which old-aged changes are found in the arteries, the eye, the gait, posture and defective ideation. This form is comparatively rare.

ELECTRO-DIAGNOSIS AND ELECTRO-THERAPEUTICS SIMPLIFIED. — Dr. Hugh T. Patrick, of Chicago, writes as follows :

Electro-diagnosis is limited to the affirmation or denial of a lesion of the lower neuron ; that is, a lesion of the motor cells of the spinal cord, or of the nerve-fibre, the peripheral nerves springing from those cells. A lesion of this neuron causes the action of degeneration, and this, stripped of all unnecessary technicalities, may be recognized by two variations from the normal, namely, a loss or very considerable diminution of faradic contractions, and the slow, worm-like contraction of the muscles to interruption of the galvanic current.

In the electro-therapeutics of organic disease of the nervous system, applications of electricity through the brain may be discarded as useless. Electricity through the spinal cord is little better. In diseases of the peripheral nerves it probably hastens recovery, and that current is to be chosen which the better causes muscular contraction.

In functional nervous disease electricity is of more practical value than in organic affections, but it is almost impossible to determine what proportion of this good effect is due to mental impression—to suggestion.

The galvanic current is chosen for facial neuralgia, costal and sciatic ; the faradic for lumbago, hysterical anaesthesia, paralysis and pain ; the galvanic for exophthalmic goitre, and sometimes for neurasthenic headache and back-ache. For facial spasms, tic, spasmodic torticollis, tremor and chorea, electricity is useful, aside from the mental effect.—*Dunghlison's College and Clinical Record*, Dec., 1896.

F. MORTIMER LAWRENCE, M.D.

LAMINECTOMY.—Gallaudet groups cases suitable for this operation as follows :

1, for fractures, both simple and compound, of the laminæ or pedicles or both ; 2, for fractures of the bodies of the vertebræ ; 3, for dislocation of the articular processes ; 4, for hæmorrhage, both extra and intradural ; 5, for tumors lying within the vertebral canal ; 6, for osteomyelitis of the bodies or laminæ, either acute, suppurative or tubercular (Pott's disease) ; 7, for tubercular meningitis and pachymeningitis ; and, 8, for wounds inflicted either by bullet or knife.

It is understood, of course, that a case of any one of these groups must show the regular symptoms of compression of the cord or cauda equina in order to render complete the indications for laminectomy.

The author states that all observers seem to commit the error, in estimating the mortality from fractures of the vertebral column, of putting all the cases together and then striking an average. In other words, no distinction is made in computing percentages as to the *region* operated upon, and this in spite of the fact that one region stands out conspicuously in all reports as being attended by far less mortality than any other. This is, of course, the region of the extreme lower dorsal and the lumbar vertebræ.

Morse makes this positive statement : "The prognosis after laminectomy is worse the higher the operation is performed."

In the cervical region *any* injury to the cord seems especially dangerous to life, not only because of its inherent structure, but also because of the easy transmission to the medulla oblongata of the effects of such injury.

On the other hand, in the lumbar region of the vertebral canal, *i.e.*, from the lower border of the body of the first lumbar vertebræ downward, there is no cord, but instead the cauda equina, a bundle of long, comparatively strong nerve-roots, far more resistant than the delicate cord, not only to the pressure effects of the fracture, but also to the shock which results from the subsequent operation for relief.

Gallaudet then summarizes the first part of his paper as follows :

1. In order to diminish the rate of mortality all cases of lumbar laminectomy should be kept strictly by themselves in computing the death-rate.

2. The advisability of avoiding all attempts at making too fine a diagnosis and at locating too exactly the point of pressure when both are reasonably clear, as they usually are in cases of fractured laminæ, because all delay beyond what is demanded by the general condition of the patient is harmful.

After the rehearsal of three private cases of laminectomy, the writer thus concludes :

"I desire to comment on two points of operative technique, viz., the use of mallet and chisels in raising the fractured bone and the opening of the dura mater.

"Both of these procedures, in my opinion, increased the shock of operation in my last case, and will not again be employed by me under similar circumstances. Opening the dura, except where there is unmistakably a large intradural hæmorrhage, is at the best a measure of merely diagnostic value. It cannot help the patient.

"As to chisels, the hammering necessary to their use must certainly add to the shock, and when, as has been my experience, the object in view can be

attained just as well by comparatively gentle sawing, followed by the use of the rongeur forceps, it would seem wiser to abandon the use of the chisel altogether."—*Annals of Surgery*.

HERBERT L. NORTHROP, M.D.

TREATMENT OF ENDOMETRITIS.—Dr. T. M. Watkins, Chicago, writes of the treatment of the various forms of endometritis. Regarding the acute septic form, when of puerperal origin, he advises antiseptic irrigations followed by the removal of any placental tissue with the finger, placental forceps or dull curette. The sharp curette is objectionable because of the danger of removing healthy mucous membrane. "This membrane when intact guards against infection, and the wound which is left after its removal gives the infection direct access to the blood-vessels and lymphatics of the uterus." Regarding the extension of gonorrhœa into the healthy uterus, he says: "I am of the opinion that gonorrhœa will seldom extend from the vagina into the healthy uterus during the intermenstrual period, provided that ordinary cleanliness be observed. During health bacteriological investigation has shown that the cervix, with its canal filled with leucocytes, guards the cavity of the uterus against invasion of the bacteria, which normally exist in the vagina. When uterine leucorrhœa exists and during menstruation, this protection to the uterine cavity is removed. Gonococci thrive better in blood serum than any known culture medium. I believe, therefore, that when gonorrhœal vaginitis exists, vaginal douches of the temperature of the blood should be used during menstruation, and that in cases of gonorrhœa the cavity of the healthy uterus should not be invaded by the sound, dilator, curette or irrigator." Specific infection of the endometrium is almost certain to occur if the patient is subject to uterine leucorrhœa. In cases where the discharge is slight inter-uterine treatment is not advisable. The curette should not be used because of the danger of producing salpingitis.

In the chronic catarrhal form his experience with injection, swabs and irrigations has been unsatisfactory. The use of the curette, irrigation and drainage is the quickest, safest and most effective means of treatment.

The curette is the best agent for the removal of a suppurating membrane in chronic septic endometritis. After curetting, a mild caustic or active antiseptic should be used, because it is impossible to remove all the mucous membrane with the curette. Carbolic acid, tincture of iodine and bichloride of mercury are recommended. He packs the uterus thoroughly with iodoform gauze and uses a gauze drain. The packing is removed in two or three days. Should the discharge persist, the packing is continued, and often enough to prevent decomposition. A discharge of pus calls for antiseptic interuterine irrigations until the discharge ceases.—*American Gyn. and Obst. Journal*, January, 1897.

W. D. CARTER, M.D.

INTRALIGAMENTOUS AND RETROPERITONEAL UTERINE MYOMATA (William H. Mathen, M.D.)—*Operative Treatment*.—The especial purpose of this paper is to describe a method of operating in hysterectomy for intraligamentous or retroperitoneal myomata too large to be removed *per vaginam*, and so firmly fixed in the pelvis as to make the abdominal operation difficult and protracted, or even impossible without great danger to important structures. The chief dangers in these cases are wounding the bladder, hæmorrhage from inability to ligate the uterine arteries, and injury to the ureters in attempting such ligation or in enucleation, if removal is to be solely accomplished through the

abdomen. Since in every hysterectomy we should, after the woman is on the operating table, thoroughly wash and disinfect the vagina, and sometimes curette the uterus, it will require but little more time to separate the vagina from the cervix and ligate or clamp the uterine arteries, which, if possible, should be done in continuity near the pelvic wall beyond the vaginal branches. We may then enucleate and separate the lower part of the uterus from its attachments, being careful to hug the uterus or tumors so as not to open the peritoneal cavity. The patient having been previously prepared for a cœliotomy, the abdomen is now opened and the operation completed from above. The adhesions, if any, having been separated, the ovarian arteries are ligated close to the pelvic wall, thereby practically cutting off all blood-supply to the uterus or tumors. Having made a circular incision through the capsule entirely around the uterus and tumors near the fundus, which in some instances may include both ovaries and tubes, enucleation may be rapidly proceeded with, hugging the uterus or tumors so as to make no opening in the capsule, or the capsule may be incised at any point or after any method the operator elects and best meets the indications. The danger of hæmorrhage or of wounding the ureters or bladder is reduced to a minimum. The capsule may be sutured to the lower part of the abdominal wound, removing all superfluous tissue, and the incision closed above.—*The American Gynecological and Obst. Journal*.

DIAGNOSIS OF PREGNANCY BY THE CHANGES IN THE MICROSCOPIC APPEARANCE OF THE URINARY PHOSPHATES.—*Conclusions.*—When conception occurs the triple phosphates in the urine change in form. They lose their feathery appearance, the change beginning at the tip and progressing towards the base. One side only may be affected, or both, leaving only the shaft and perhaps a few fragments adhering. The shaft assumes a beaded or jointed appearance. These changes commence within twenty days after conception, and are most marked in the early months and almost absent in the later months. When the death of the fœtus occurs, the phosphates resume their normal appearance.

When this change is recognized it forms a strongly presumptive evidence of pregnancy and a probable diagnosis of pregnancy can be made without a physical examination or without exciting the suspicion of the patient.

Method of Preparing the Urine.—Take about one inch and a quarter of the suspected urine in a small test-tube, and add about one-third as much of Tyson's magnesian fluid as there is of urine. This will throw down the triple phosphates in about fifteen minutes and furnish the necessary material for microscopic examination. Tyson's fluid is composed of one part each of the muriate of ammonia, aqua ammonia, and sulphate of magnesia, and eight parts of distilled water.—*American Gynecological and Obst. Journal*.

GEORGE R. SOUTHWICK, M.D.

TREATMENT OF IRITIS.—Mr. Juler, in a most practical article, insists on the carrying out of four most important steps in the treatment of iritis.

First.—Make sure of the diagnosis, that no harm may result from the employment of irritants or astringents, and, in case of doubt, wait.

Secondly.—In all cases of plastic iritis secure complete dilatation of the pupil, and at as early a moment as possible. Adhesions to the lens capsule must be prevented or broken down if possible, and the iris placed at rest by

the use of a sufficiently powerful mydriatic, preferably the sulphate of atropine, five grains to ounce, as instillation or ointment, every three hours, or oftener; even every hour for a few hours when already existing adhesions resist the action of the drug. Even when the plastic bands are too firmly organized to be broken down by the mydriatic, the dilatation of the unattached portions of the iris will serve to quiet the whole and prevent complications.

When atropine causes irritation, the sulphate of duboisine or the scopolamine, 0.5 per cent., may be substituted.

Thirdly.—Relieve local pain and congestion. This is best accomplished by the use of cocaine hydrochlorate, either alone as a 2 per cent. solution or in conjunction with atropine.

Hot, moist applications are most important. Compresses of absorbent cotton, wet with hot water and covered with oil silk and dry batting, and held in place by a light bandage, make the most convenient and effective dressing.

In cases where the pain persists in spite of the above treatment, a paracentesis of the anterior chamber will often give prompt relief; and, finally, when even this is inoperative or cannot well be carried out, morphia, hypodermically, potassium bromide and chloral hydrate, by the mouth, should be promptly exhibited.

Fourthly.—Carry out carefully the treatment of whatever constitutional ailment may be found associated with the iritis, the most important being syphilis, rheumatism and gout.—*Medical Press and Circular*, May 13, 1896.

CHRONIC SUPPURATION OF THE MIDDLE EAR.—Cheate, of London, says that to treat this disease successfully it is most important to thoroughly examine the ear, nose, pharynx and general physical state. Where pain or tenderness is complained of, the introduction of the speculum and manipulation of the ear should be most gently done. If pulsation is seen at bottom of speculum or in walls of meatus, acute inflammation must be present. The presence of a sero-pus, it is claimed, indicates a disposition toward healing, and a mucopus an acute or subacute condition. When the discharge is brownish or blood-stained, polypus or granulative tissue exists, or, possibly, caries of ossicles.

Perforation of Shrapnell's membrane indicates a slow course and stubborn, on account of situation of the trouble in the attic, where the ossicles are most crowded together.

Ordinarily syringing the ear night and morning is sufficient to keep the parts clean, and will often accomplish a cure if the solution used be carbolic acid 1 : 60, or boric acid sol. 1 : 80.

When granulation tissue exists, the instillation of alcohol and boric acid will be found effective. He gives this formula: \mathfrak{z} i. of boric acid powder to \mathfrak{z} ij. of alcohol. Of this, ten drops are mixed with ten of hot water, poured into the ear (after cleansing and drying), and allowed to remain for ten minutes.

The use of the Politzer bag is advised to clear the Eustachian and middle ear of discharge. The practice of packing pieces of cotton wool into meatus is strongly condemned.

If the discharge is profuse, a large piece of absorbent cotton may be worn on the outside of the ear. Adenoid vegetations and hypertrophic nasal mucous membrane must be removed, and atrophic conditions treated by local stimulants.—*Pediatrics*, May 15, 1896. CHARLES M. THOMAS, M.D.

MONTHLY RETROSPECT

OF HOMŒOPATHIC MATERIA MEDICA AND THERAPEUTICS.

THE TREATMENT OF RACHITIS.—Prof. W. H. Bigler, in the course of a clinical lecture to the students of Hahnemann College, outlines the treatment as follows :

Rachitis being so decidedly a disease of faulty nutrition, the conditions of diet and hygiene will claim your first attention. Although we cannot begin the treatment quite two hundred years before the birth of the child, we can get in a few months of effectual treatment before the appearance of the infant stranger in whom we have reason to fear a predisposition to this disease by paying particular attention to the mother's health during her pregnancy. Her diet should be, where possible, of the most nourishing kind, consisting largely of nitrogenous food, with a liberal supply of lime salts, in which, you may remember from your physiology, the blood of the pregnant woman is always apt to be deficient. There is no reason why it should be impossible to exercise a pre-natal influence upon the child through remedies administered to the mother.

The nourishment of the child when here should also be of the best, and what is the best you must in each case be prepared to determine ; only remember always that modified cow's milk, or some artificial food, is to be preferred to the milk of a sickly woman, even if she is related "by blood" to the infant ; that the supply of starchy food is to be very limited or entirely cut off, while the fats are to be increased ; and, finally, that sterilized milk is not an unmixed blessing, as I have told you on other occasions. Condensed milk, except in rare instances, is to be prohibited. In older children the use of fruit juices will prove of benefit, even where the scorbutic condition is not marked. I often allow raw beef to be chewed and the juice swallowed, and the cure of one of my cases I ascribe to the use of thin slices of bread spread on thick slices of butter.

On account of the predisposition to "take cold" and the dangers resulting, you will have to be very careful, and precise in prescribing out-of-door exercise, which in itself would also be so very beneficial. Sea air and sea-bathing are both of use, but are not to be mentioned, much less recommended, to those whose circumstances would not admit of their being procured for their children. Fresh air, good food and clean surroundings are within the reach of all who really desire them.

Of the internal remedies the preparations of lime seem to be the most frequently called for, and especially *calc. phos.* The old school use *phosphorus* as their sovereign remedy, and you will find that it is often the "indicated remedy." *Phosphoric acid* may also be called for by marked debility and exhaustion. Where glandular involvement is predominant we think well of the *odides*, particularly of *lime*, *arsenic* and *barium*, or of *iron*, in the form of

the well-known syrup, where the anæmic appearance is striking. *Calc. carb.*, *baryta carb.*, *sil. calc. fluorica* and *fluoric acid* can also be compared. Crumbling of the teeth almost as soon as they appear will best be met here, as elsewhere, with *kreosote*. Various other remedies may, of course, be called for, since we homœopaths are not bound to any line of treatment by the name of a disease. The treatment of the deformities which we have seen to result in so many especially neglected cases belongs to the orthopædic surgeon, but you, as general practitioners, can do much to prevent their occurrence, and even to remedy them before they are too far advanced, by proper physical training, gymnastics and massage.—*The Hahnemannian Institute*, February, 1897.

THE THERAPEUTICS OF WHOOPING-COUGH.—A recent issue of the *Medical Century* (March 1, 1897) is largely devoted to a whooping-cough symposium, the contributors including twenty well-known physicians from all parts of the country. Theoretical indications are given for *drosera*, *mephitis*, *corallium rubrum*, *coccus cacti*, *cuprum*, *belladonna*, *ipœcac*, *tartar emetic*, *cina*, *magnesia phos.*, *hyoscyamus*, *sanguinaria nit.*, *gelsemium* and many other more or less classical remedies. The general tone of the articles, however, is a despondent one. Cowperthwaite, of Chicago, says that the chief feature of his experience lies in the fact that it has been very largely an unsatisfactory one. He has often been able, apparently, to mitigate the severity of the disease, but has never been able to cut short its course to any appreciable extent. The two most vaunted remedies, *drosera* and *corallium rubrum*, have proved of little value in his hands, though used from the lowest potencies up to the 30th and 200th. There are only three remedies from which he has been able to obtain any positive results. The first and most important of these is *belladonna*. In the first stage it is often of considerable value if its indications are present, as is often the case; dry cough, the violent paroxysms being accompanied by symptoms of cerebral congestion, with the well-known indications of this drug—flushed face, dilated pupils, throbbing carotids, etc. Later on in the disease he has derived most benefit from either *ipœcac* or *tartar emetic*. It is often quite difficult to differentiate between these drugs; both give an excess of mucus, rattling breathing, cyanosis and vomiting. In *ipœcac* there is a tendency to spasm, while with *tartar emetic* there is profuse relaxation with drowsiness following, the general symptoms being more asthenic in character.

Of the very adjuvants recommended, most of which he has tried, he can say very little favorable. The inhalation of various gases, chloroform, ether, etc., has proven of doubtful service in his hands. Nor has he derived benefit from either hot or cold applications. Douches, sprays, dry or moist inhalants are, to say the least, of very questionable value, and he concludes that, finally, "all is vanity and vexation of spirit."

AURUM IN TRACHOMA.—In this disease, either with or without pannus (especially with), there is probably no remedy oftener indicated than *aurum*. There is commonly much photophobia, lachrymation and pain, burning or dull in character, compelling one to close the lids, usually worse in the morning, and ameliorated by application of cold water.—*Hom. Eye, Ear and Throat Journal*, February, 1897.

F. MORTIMER LAWRENCE, M.D.

THE HAHNEMANNIAN MONTHLY.

MAY, 1897.

A CASE OF HARD CHANCRE OF THE TONGUE.

BY FRANK H. PRITCHARD, M.D., WEAVER'S CORNERS, OHIO.

A NUMBER of articles have appeared in recent years on extra-genital chancres, and it will be noticed that those of the tongue occupy quite an important place in some statistics, those of the lips being most frequent in the chancres of the mouth and its neighborhood. Dr. O. Petersen, *Journal of Genito-Urinary and Cutaneous Diseases*, 1889, p. 37, has collected all the available statistics showing the relative frequency of extra-genital chancre. In Mauriac's handbook 1773 cases of syphilis in men were collected from various authors, of which only 76 cases (4.3 per cent.) were of extra-genital chancre; of these 8 were on the tongue. Dr. Veslin, *Annales de Dermatologie*, April, 1890, gives a résumé of all the cases of extra-genital chancre occurring in the service of Prof. Fournier at the Hospital Saint-Louis, in Paris, from February, 1888, to February, 1889, and Dr. Feulard, in the same number, completes the record up to 1890. In the former series of 26 cases there were 2 of lingual chancre; while in the latter, 34 cases, there were 3 cases of chancre of the tongue. Prof. Pospelow, of Mos-

cow, *Journal of Cutaneous and Genito-Urinary Diseases*, 1890, p. 359, has observed at the Mjassnitzky Hospital of that city in ten years 198 cases of extra-genital chancre, and of these there were 3 chancres of the tongue. The total number of infections by the mouth was 99, thus constituting the most frequent form of extra-genital infection; and especially has he found it so among the working classes of Moscow on account of the close community of life among syphilitics and the use of eating utensils and drinking glasses in common rather than to infection from sexual perversion. Prof. H. Zeissl, *Lehrbuch der Constitutionellen Syphilis*, 1864, p. 37, says: "Es gibt keinen Punkt der allgemeinen Bedeckung eines von Syphilis freien Individuums, wo nicht die Hunter'sche Induration entstehen koennte; so wie keine Stelle eine Immunitaet dagegen besitzt so besitzt auch keine ein besonderes Privilegium sie hervorzubringen; sie entsteht ueberall, wo das syphilitische Virus auf laedirte, excorierte oder verduennte Epidermis eingebracht wird. Ebenso verhaelt sich die Schleimhaut gegen das syphilitische Virus. . . . *Sehr haeufig entstehen Indurationen an der Zungenspitze durch sogenannte Seraphienenkuesee oder durch thierischen Missbrauch der Zunge, den naeher zu bezeichnen sich unsere Muttersprache stracubt (Cunnilingus).*"

A short time ago I saw, in consultation with Dr. F. Miller, of Bellevue, Ohio, a young man of 25 years, who appeared in robust health, and beyond having had typhoid fever eight years previously, presented nothing of interest in his individual history excepting a gonorrhœa some years before. His father died of consumption. This patient, a railroad employee by occupation, had noticed nine weeks before a small "blister" on his tongue, which at first was slightly irritating and seemed to be covered with a thin and whitish membrane. He took no notice of it, but picked and rubbed at it occasionally. It continued to increase in breadth and depth, until it occupied a place very near the tip of his tongue of the size of the unsharpened end of a lead pencil. At the same time the suprahyoid glands began to enlarge. The ulcer became covered with a shreddy membrane, which was easily detachable; its margins were shelving and the surrounding lingual tissue indurated. On removing the detritus covering it it would bleed slightly. It was never painful to any extent. The glandular

enlargement continued until it was nearly as large as one's fist, pushing out the lobe of the ear like a parotid gland swollen with the mumps. The skin covering it was never red, tense nor sore, as if suppuration were to take place. The ulcer spread slightly anteriorly until it reached the tip of the tongue and then also extended somewhat under the tongue. Seven weeks after its first appearance he broke out with a papulo-pustular eruption upon the forehead and legs, which was also mixed with a few small furuncles on the legs. I saw him two weeks after this. Then the mass of swollen glands had greatly decreased to the size of a dollar in diameter and not noticeably prominent. Otherwise there was no change except that he had neuralgic pains in his teeth, and he was sleepless and restless of nights. He was then taking mer. protojod. 2x three times a day, with apparently good results. Locally, calendula was being used. I forgot to mention that the base of the ulcer was quite indurated to the feel. The ulcer was then covered with a purulent and half-organized membrane which was easily detachable. The whole question was as to diagnosis. I regarded it as a primary syphilitic lesion on account of the obstinacy to treatment and its persistency, the appearance of the ulcer, ulcerated with a reddened margin, which was indurated, and this sclerosis extended even into the surrounding tissue, the sudden and voluminous swelling of the lymph-glands and the appearance of secondary symptoms—roseola, nightly aggravation, etc. Chancre of the tongue is quite rare. It is either due to sexual perversion or accidental infection by pipes, cigars, eating utensils, etc. This patient denied all vicious habits, though such statements are usually to be taken with great reserve; yet he said that he was in the habit of picking up pipes promiscuously and smoking them. This might have been the source of infection in his case.

Prof. R. Bergh, *Monatshefte fuer Praktische Dermatologie*, Bd. xvii., 1893, p. 605, states that syphilis from chancres of buccal origin always has had the reputation of giving rise to severe forms of the disease, and he cites Fournier and L. Duncan Bulkley to that effect. On the contrary, Ricord, *Clinique Iconographique*, Livr. 8, 1845, pl. xxi., asserts that the seat of the chancre has no influence upon the subsequent gravity of the disease. Prof. Fournier, *Prognostic de la Syphilis Issus des Chancres Extra-*

Génitoux; *La Semaine Médicale*, No. 60, 1895, in a more recent article claims that the greater gravity of certain cases following buccal and other extra-genital sites of chancre is dependent upon secondary infections by other microbes, etc., as well as to the previous state of the patient's constitution. Therefore, taken all in all, the outlook in general is that of syphilis from genital chancres.

UNCERTAINTY IN THE PROGNOSIS OF MENTAL DISEASE.

BY C. SPENCER KINNEY, M.D., MIDDLETOWN, N. Y.

(Read in Albany, N. Y., February 9, 1897, before the Homœopathic Medical Society of the State of New York.)

A MOST annoying condition that confronts the one who is treating nervous disorders is the uncertainty of the outcome in any given disease. In the ordinary run of medical and surgical cases the physician or surgeon can form some estimate of the ultimate result of the treatment or operation, especially if the case has been under treatment for some time. In mental diseases, however, we find the cases entirely different.

Acute mania may begin and progress with every indication of making a good recovery and suddenly relapse for no known reason, the symptoms assuming those of paranoia, chronic mania, dementia, or even, perhaps, paresis. So long as the symptoms are favorable there is always reason to hope for a favorable outcome of the disease, but experience teaches that the uncertainties must always be considered in speaking of the result likely to follow continued treatment.

In melancholia one feels at times more encouragement when the attack arises from a misfortune that has been partially remedied, and when the patient is able to appreciate his situation to a limited degree even if, through weakness, his judgment and will-power are feeble. These, under hospital treatment, he is likely to recover when his physical condition is improved. In melancholia we must consider whether or not the disease is a forerunner of paranoia or of paresis, as in many cases of paranoia, as well as of paresis, the disease is ushered

in by an attack that seems a case of simple melancholia. Generally, paranoia is liable to develop when delusions of persecution and a morbid distrust of people and of their own surroundings have shown themselves.

In paresis there are indecision and indifference of manner manifested; the latter symptom is pathognomonic of paresis, and is likely to be closely associated with the earlier stages of that disease. While paresis is considered a fatal disease, yet the remissions likely to occur at any time during its course tend to make it very difficult to estimate the probable duration or course of the malady.

Within the past twenty years several cases have come under our direct observation in which patients were admitted suffering from the well-known motor and mental symptoms of paresis, their friends giving a history of the onset and course of the disease that tended to confirm the diagnosis. These patients continued under treatment, developing, from time to time, the usual symptoms of the disease, when, without any apparent cause, a remission of symptoms, both physical and mental, took place, and they were taken home by their friends apparently appreciative of their usual relationships in life, although in some cases evincing a diminished degree of mental vigor.

I do not know when it is impossible for a remission in paresis to take place. In one instance the remission occurred after two severe apoplectiform seizures, in which, after the last attack, the left side was involved. Motion in the leg returned after several months, while the arm remained very much enfeebled. This patient was unable to enunciate his words, although he frequently attempted to say that he was first-rate. He was very weak physically, having emaciated rapidly. His sphincters were paralyzed, the movements of his bowels and water were involuntary, and he was incapable of assisting himself or intelligently appreciating his surroundings. After his apoplectiform seizures his temperature ran up to 105° F., and gradually decreased until, for several weeks, it was from 96.2° F. in the morning to 98.4° F. in the evening. That the thermometer registry was normal at night was due to the fact that the patient's vitality was too much depressed to raise it any higher.

This man began to improve after his death had been expected hourly, and to-day he is up and about the ward, an active worker in the dining-room, in excellent spirits, possessing good memory and judgment, and feeling that he is as well as at any time in his life, except for the partially paralyzed left arm. He possesses, however, that indifference that has been previously noted.

Three other cases of paresis left the hospital, returned to their usual avocations, and continued to do well. Two of them are living to-day; one died from apoplexy while attending to his usual work.

The duration of the disease was formerly thought to be about three years, and but few cases were supposed to live for a longer period. Since, however, the disease has become better understood, a limit cannot very well be given.

Cases of terminal dementia are not supposed to recover, but several who have passed through an attack of acute mania or melancholia into a demented condition in which the enfeeblement of the mind was most manifest, in which there was a gain in flesh without a corresponding improvement in mind, and after all hopes had been abandoned, have yet shown signs of improvement, and have been able to get out and do some light manual labor, and afterwards recovered to the extent of returning home and taking up some form of employment that was not a strain upon them. Several of these cases came to us as acute mania in which the habit of masturbation was one of the contributing causes of dementia following this mania. These were young persons between the ages of seventeen and twenty-five, and had not reached a mature physical and mental growth.

ANTITOXIN OR CARBOLIC ACID—WHICH?—Dr. J. Wylie Anderson, of Denver, quotes from various sources statements as to the sequelæ of antitoxin injections, which include everything, urticaria, pain in the joints, local pain and numbness, tenderness of muscles, diarrhœa and albuminaria. He then quotes from Allen's *Handbook* the symptomatology of carbolic acid, in which all the effects above mentioned may be found, and finally asks, in all seriousness, whether the good results of the antitoxin treatment may not be credited to the homeopathicity to diphtheria of the contained carbolic acid.—*Denver Jour. of Hom.*, February, 1897.

GLUCOSE IN URINE ANALYSIS.

BY CHARLES PLATT, PH.D.

Professor of Chemistry and Toxicology, Hahnemann Medical College, Philadelphia.

(Read before the Saturday Night Club of Microscopists, December Meeting.)

THE recognition of sugar in the urine is a sufficiently important matter to warrant more careful study than usually obtains. The most rudimentary knowledge of chemical tests will suffice for glucose in aqueous solution, but the positive detection of glucose in the urine is a far more difficult problem. The complex nature of the solution, the peculiarity of the sugar tests—depending mainly upon the reducing power of sugar, the presence of reducing substances other than sugar in normal urine, the possible large increase of these reducing substances in disease or after the ingestion of certain foods or drugs, the presence of a minute amount of normal glucose which is to be disregarded, the prevention of the tests by abnormal substances sugar being present, and the obtaining of the tests through abnormal substances sugar being absent—these are some of the factors which together add to the perplexity of the amateur chemist, and render a thorough knowledge of the subject the only escape from confusion.

Fortunately, however, for the clinician's peace of mind there are several tests which are generally believed to be all that is desired; the test is applied and the decision made therefrom, a reaction is or is not obtained, and sugar is accordingly pronounced as present or absent. Such tests are, as I say, of value in that they relieve the physician of distressing doubt; they are not always so satisfactory in result to the patient. The evolution of the clinical test is about as follows: Announcement in some chemical journal, with a statement of imperfections and limitations; a few years later its discovery by a physician; announcement in a medical journal, imperfections and limitations omitted; finally, acceptance by the profession and a sudden boom in office urine analysis. The rest of the story may be summed up as a failure in diagnosis from results of analysis, a decline in office urine analysis, and the end—a

renouncement by the physician of the chemist and all his works. "Urinary analysis is unsatisfactory, leads to false conclusions, cannot be relied upon," etc. All of which is perfectly true of some kinds of urine analysis.

As a chemist I am interested in combating such statements, and incidently also all urine tests for which extravagant claims are made. When an infallible test is discovered I will welcome it with the rest of you; in the meantime I will point out a few of the methods which we may fall back upon for the present—methods which, executed with care, will yield results of an entirely satisfactory nature.

A *clinical* test is one which may be performed with a minimum of labor, a minimum of thought, and in a minimum of time. It would be well, of course, if it would also give accurate results, but that is, maybe, too much to expect; if the author of the test is sufficiently grand in his claims an examination of their truth may conveniently be dispensed with. A *chemical* test is of a different nature, but the results are surprisingly pleasing. Physiological sugar may be recognized, the slightest pathological increase may be detected, and the exact amount determined. One test alone will not accomplish all of this, but by an intelligent grouping of tests the chemist, and the clinician, too, if he will but take the trouble, can obtain positive results which will enhance his estimate of urine analysis for the future.

Of all the tests for sugar the copper tests are probably the most generally used. These depend upon the power of glucose in alkaline solutions to reduce soluble cupric compounds to the generally insoluble cuprous oxide. Unfortunately sugar is not alone in possessing this power. Many of the normal constituents of the urine, particularly when in increased amount, exert the same action, and there are innumerable other substances which occasionally find their way into the urine, and which reduce copper compounds quite as perfectly as does sugar itself. It would be wearisome to name all of these substances which oftentimes interfere with the copper tests; the most important, maybe, are glycuronic acid, excess of uric acid, of hippuric acid, creatinin, mucin, urobilin, indican, etc.; the decomposition products of benzoic acid, salicylic acid, copaiba, camphor, cubebs, phenol, gallic acid, pyrocatechin, pyrogallol, hydroquinone,

protocatechuic acid, urolenic acid, urochloralic acid, turpene-glycuronic acid, etc., not to mention levulose, lactose and other carbohydrates sometimes present. While, then, there are substances other than sugar which cause reduction of the copper solution, so also are there many substances which by their presence in notable amount prevent this reduction. Creatin, albumin, peptone, pepsin, ammonium salts, etc., are of this latter class.

It is evident that the detection of sugar by reduction of copper solutions has its disadvantages, but for all that the copper test is often of value in our analysis.

Trommer's test, for many years the most generally used test for sugar, has of late rather fallen into disrepute. The relatively large amount of urine used in this method increases the danger of reduction by substances other than sugar, and this fact, together with the erroneous statement of the test in many text-books, has operated strongly against it. As a matter of fact the Trommer's test requires very careful manipulation, and as this is rarely accorded it, the results obtained are naturally unsatisfactory. For my part I consider the Trommer's test as one of the most delicate of the copper tests, and prefer it to all others with the one exception of Allen's modification of Fehling's. The correct statement of the test is as follows: To the urine in a test-tube add one-fourth volume of 30 per cent. sodium hydroxide, and then add 10 per cent. cupric sulphate solution, *drop by drop, until a slight permanent precipitate is formed.* Heat to boiling, and, in presence of glucose, a reddish-yellow precipitate of cuprous oxide separates. If glucose be present it will be noticed that the cupric sulphate will form a greenish-blue precipitate on coming in contact with the urine, but that on agitation this precipitate will dissolve, forming a dark-blue solution, itself a satisfactory test for glucose in absence of sucrose and of glycogen. As most of the reducing substances other than sugar, which are apt to be present in the urine, react only at the boiling temperature, a second test may be prepared as described, and, without heating, allowed to stand twelve to twenty-four hours. If sufficient sugar be present a red precipitate of cuprous oxide will be obtained. The test so performed is practically free from the objection of other reducing substances, but requires a somewhat larger amount of sugar to be present;

in other words, it is less delicate. A decolorization of the solution without separation of cuprous oxide is not necessarily indicative of sugar, nor is a precipitate forming only on cooling of the test. In the former case the smallest amount of cuprous oxide may be detected by Hoppe-Seyler's reaction with hydrochloric acid.

As an introduction to Trommer's, or, for that matter, to any sugar test, filtration through charcoal may be resorted to. By continued filtration a highly-colored urine may be reduced to a colorless solution practically free from reducing substances, sugar included, unless the latter be in large amount. Seegen proposed to filter repeatedly through charcoal, to reject the filtered urine, to wash the charcoal carefully with distilled water, and to apply the tests to the washings. Charcoal filtration is, however, by no means so perfect a process as is Brücke's method with lead acetate. In this the phosphates, carbonates, sulphates, coloring-matter, etc., are removed by precipitation with neutral lead acetate.* To the filtrate ammonium hydroxide is added in excess, the precipitated plumbic glucosate is filtered off, washed carefully, suspended in water, decomposed by passing hydrogen sulphide, and the hydrogen sulphide removed by boiling. The clear solution is then evaporated to the original volume of urine, allowed to stand several hours, again filtered, if necessary, and, finally, the filtrate is tested by any reliable sugar test.

A less tedious manner of securing at least a partial separation of other constituents of the urine from the sugar is by Allen's method. Heat 7-8 cc. of urine to boiling, add 5 cc. of the cupric sulphate solution as prepared for Fehling's, cool, and without filtering add 1-2 cc. of a saturated solution of sodium acetate. Filter from the precipitated substances, and to the filtrate add 5 cc. of the usual alkaline tartrate solution of Fehling's. Heat to boiling, boil fifteen to twenty seconds, and then let stand. More than 0.25 per cent. of sugar will show before the mixture begins to boil. Less than 0.25 per cent. of sugar will show as the boiling begins or on partial cooling.

Fehling's test, qualitative and quantitative, volumetric and

* A boiling saturated solution of plumbic chloride may be substituted for the (10 per cent.) solution of lead acetate.

gravimetric, is too well known to require comment. It is to-day the best method in our possession for the quantitative determination of sugar.

Haine's test is probably equally well known, and is a highly satisfactory clinical test. The small quantity of urine used precludes the probability of reduction by normal urinary constituents, but at the same time the delicacy of the test is lessened. Small amounts of sugar are not detected, and consequently a negative result with Haine's does not mean that sugar is absent. I have frequently obtained results for sugar by means of Trommer's and Fehling's tests when Haine's test failed entirely. That the reduction, sometimes amounting, by Purdy's method, to an equivalent of 0.30 per cent. of glucose, was in reality due to sugar and not to other substances was, of course, duly ascertained by the Allen, the phenylhydrazin and the fermentation tests.

There are many copper tests for sugar, and it is not at all our purpose to describe them each in detail. Focke's test, resembling Allen's; Soldaini's test and the similar test of Ost; Pavy's solution of copper sulphate, Rochelle salts and potassium hydroxide, a poor substitute for Fehling's; Pavy's ammonia test solution, Purdy's ammonia test solution, Gand's, Pellet's, Causse's, Bartley's, Arthuss', Gerrard's, Loewe's and Schmiedeberg's tests are all variations on the one theme, the Fehling's test. If to the above we add Barfoed's copper acetate test, Pavy's cupric test pellets and Oliver's test papers, we will have some idea of the field we have to select from. Certain of the modifications introduced by these tests are, however, of value, particularly to the clinician. Eight of the seventeen tests named have for their end-reaction the decolorization of the blue copper solution without the precipitation of the red cuprous oxide, the latter being held in solution by ammonia, by potassium ferrocyanide, or by potassium cyanide. As an example of the ammoniated test we have:

Purdy's solution: Copper sulphate, pure, crystalline, 4.742 grammes; potassium hydroxide, 23.50 grammes; ammonium hydroxide (sp. gr. 0.9), 450 cc.; glycerol, 38 cc.; distilled water to 1000 cc. Thirty-five cubic centimetres of this solution are measured into an Erlenmeyer flask of about 200 cc. capacity, 70 cc. of distilled water are added, and the mixture heated to

boiling. The urine is added drop by drop to the boiling solution until the blue color of the latter is just destroyed. Note the number of cubic centimetres of urine added. Thirty-five cc. of the test solution are reduced by 0.020 gramme of sugar, hence $\frac{2}{u} =$ per cent. of sugar, u representing the amount of urine added. As is the case with all volumetric copper tests, the results depend largely upon the manipulation, varying with the surface of the liquid exposed, with the length of time occupied by the operation, with the concentration of the sugar solution, and with the dilution of the test solution. The experimenter should determine these factors by tests with urines of known sugar content and regulate his procedure accordingly. In the case of Purdy's solution I have found that many normal urines will show a reducing power equivalent to from 0.20–0.30 per cent. of glucose, this substance, however, being entirely absent. A deduction of 0.20 per cent. for each 5 cc. of undiluted urine added will then give greater accuracy in results.

Using potassium ferrocyanide to prevent the precipitation of the cuprous oxide, Causse recommends a solution made up as follows: 10 cc. of Fehling's, 20 cc. of distilled water and 4 cc. of ferrocyanide (1–20). Bartley's solution differs from the above only in having a larger percentage of the ferrocyanide.

Knappe and Sachsse have recommended solutions of mercury salts as substitutes for the copper solutions, the first named using mercuric cyanide, the latter, mercuric iodide. These tests are, however, more subject to error from variations in the manipulation, and offer no particular advantages over Fehling's solution. Rübner bases a test for sugar on the change in color on heating a precipitate of plumbic glucosate. The reaction is not distinct, and is not reliable for small amounts of sugar. Tollin's silver nitrate test, Maumène's stannic chloride test, Marson's ferrous sulphate test, Agnosti's gold test and Pratesi's dichromate test are useful only as adjuncts to other more reliable methods. Böttger's bismuth test, particularly as modified by Brücke using Frohn's solution, is more satisfactory, and is, in fact, one of our most reliable methods. Add a few drops of Frohn's reagent* to 10 cc. of water in a test-tube, then add

* Frohn's reagent: Potassium iodide, 7 grammes in 20 cc. water. Heat and

hydrochloric acid, drop by drop, until the precipitate which has formed just disappears. To 10 cc. of urine add the same amount of reagent and of acid as in the preliminary trial test. Filter, make the filtrate strongly alkaline with sodium hydroxide, and boil. A black precipitate will indicate the presence of glucose. Hager has recommended an alkaline solution of bismuth with tartaric acid, but this is no improvement over the original Almen-Böttger or Nylander's test.

Moore's test with potassium hydroxide is not delicate, though, as modified by Bouchardat, who substitutes lime water for the alkali, it is capable of giving fair results in careful hands. Garrod has suggested the substitution of potassium carbonate for the potassium hydroxide. Johnson's picric acid test, even as modified by recent investigators,* has failed in my hands to give satisfactory results, though I must confess to have given it but a limited trial.

Undoubtedly the best of the newer tests for sugar is that with phenylhydrazin, a test which, if properly manipulated, will give entire satisfaction. Physiological sugar may be shown thereby, but this is not a disadvantage, as the result does not depend upon a color change or upon a precipitation of metal or oxide, but upon the formation of an actual compound with glucose itself. Experience will soon enable one to recognize any increase over the physiological percentage. To secure the best results I have adopted the following procedure: 1 gramme of phenylhydrazin hydrochloride is added with 2 grammes of sodium acetate to 25 cc. of urine with 10 cc. of water. The mixture is heated on the water-bath for one hour. If glucose be present phenylglucosazone separates out as a fine yellow mass of minute needle-like crystals (melting point 204° – 205°). Uric acid, urates, creatin, creatinin, oxybutyric acid, urochlo-ralic acid, uroxanthic acid, salicylic acid, phenol, etc., do not interfere. Other carbohydrates produce osazones with phenylhydrazin, but as a rule these other crystals may be recognized, if not by their appearance, then by their melting points. Glycuronic acid compounds may produce a semi-crystalline deposit, but with long-continued heating on the water-bath there is but little danger of error from this source.

add 1.5 grammes of freshly precipitated bismuth subnitrate and about 1 cc. of strong hydrochloric acid.

* See McDonald, *Lancet*, Sept. 19, 1896.

Various formulæ have been suggested for the phenylhydrazin test by von Jakseh, Schwarz, Laves, Ultzmann and others, but the description of the test above is believed to be the most satisfactory. In case the crystals are not clearly revealed, however, the yellow precipitate may be separated and dissolved in hot alcohol, the alcoholic solution added to water in a beaker, the alcohol removed by evaporation and the deposit again examined. This test is exceedingly delicate, responding to 0.001 per cent. of glucose in aqueous solution and to 0.05 per cent. in the urine.

Wender's methylene-blue test, Crismer's safranine test, the nigrosine and indulin tests, Molisch's alpha naphthol test, the thymol and menthol tests, and Mulder's indigo-carmin test, are all of a class yielding results with the most minute amounts of carbohydrates. The normal urine in undiluted condition will give the reactions clearly, but when highly diluted responds only in presence of pathological sugar. Hoppe-Seyler's O-nitrophenylpropionic acid test is delicate and useful, as is also Penzoldt's process with diazo-benzolsulphonic acid.

The one remaining test to be considered of the many others which might be mentioned is the fermentation test. This requires no description. I will merely call attention to the fact that, because of the very different principles here involved, this test is an exceedingly valuable adjunct to our examination, and by it otherwise doubtful reactions may often be decided. It is not delicate as compared with other tests, will not do for minute amounts of sugar, is sometimes prevented by substances which may be present in the urine, and, finally, the yeast itself may give off gas on decomposition; but, for all this, fermentation is still one of the best of tests, and if care be taken to make blank analyses, at the same time, with yeast and water, and yeast and normal urine, the chance of error is largely reduced. Applied as a quantitative test the well-known Einhorn's apparatus may be used, the carbon dioxide being measured and the sugar calculated therefrom, or the Roberts' specific gravity method may be used. The specific gravity of the urine being determined before and after fermentation, due allowance having been made for any difference in temperature, the loss in degrees (taking the third decimal place as units place) is approximately equal to so many grains of sugar per fluidounce. Multiplying by 0.234 we obtain the percentage. The accuracy

of the result depends largely upon the care with which the specific gravity has been determined. The pycnometer should be used if possible, or, if not, then at least a reliable urinometer, such, for instance, as one of the certificated instruments supplied by Messrs. Bullock & Crenshaw. The ordinary urinometer, even those for which a considerable price is paid, may vary from the correct reading by several degrees. Four degrees variation, not an uncommon one, would give an error of 1 per cent. in the sugar, thus rendering the test worthless. Instead of determining the sugar by loss in density, rather better results may be obtained by Antweiler's and Breitenbend's method of fermentation in presence of Rochelle salts and determination of the loss in weight due to evolution of carbon dioxide. This loss in weight multiplied by 2.045 gives the amount of glucose in the sample taken (2.0454 parts of glucose producing one part of carbon dioxide on fermentation).

As Tyson remarks of urine tests in general, so is it true of sugar tests in particular, that much of the difference of opinion as to the value of the different methods is due to the unequal experience of the observers. With all tests there are certain very evident reactions and certain doubtful ones, and to interpret these last experience must often be relied upon. As a word of advice, select three or four tests which have stood the trial of experiment, and then study these carefully in all their relations. They will increase in value with each application.

A CASE OF VESICULAR SYPHILIS.

BY L. T. ASHCRAFT, M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the County of Philadelphia,
March 11, 1897.)

ALTHOUGH much has been written concerning the syphilides, yet the vesicular type has received but little attention. Two syphilographers discuss it, Morrow and Keyes. Gleaning from the former,* it is to be inferred that this variety may be congenital or acquired, although he does not elevate it to the dignity of a distinct class, but groups it as the most important

* See *A System of Genito-Urinary Diseases, Syphilography and Dermatology*, by Prince A. Morrow, p. 125 and p. 639.

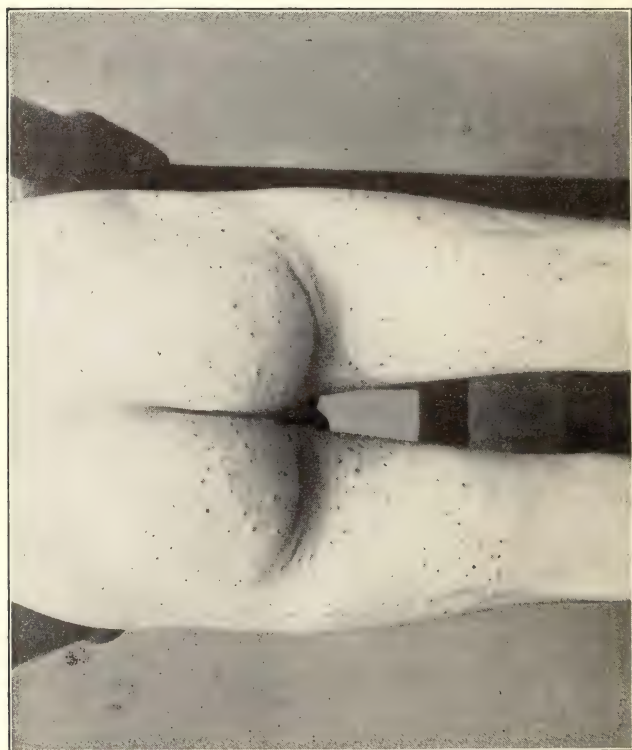
variety of the pustular form, because, quoting verbatim, "Vesicles sometimes form on erythemato-papular lesions from the intensity of the inflammatory process, but their presence is an accidental or accessory phenomenon of exceedingly limited duration." Much skepticism is manifested concerning the hereditary variety. He admits never having seen a case, and thinks that those reported may be mistaken for a vesicular type of eczema. The other authority* mentioned admits its rarity, and divides the class into three distinct varieties: *a.* varicelloid syphilide; *b.* general vesicular syphilide; *c.* vesicular syphilide in groups. The characteristics dividing them are of interest chiefly from an etymological standpoint. I present for your inspection photographs which show with sufficient clearness the features which must be enumerated to establish the diagnosis. Better pictures might have been secured had the patient submitted to the camera earlier.

The history is brief. Four weeks after intercourse a chancre appeared on the dorsum of the penis, close to the hair covering the pubes. Peculiar because of location, size, and its very unhealthy and inflamed appearance. Inguinal adenopathy was established, the left chain containing pus. The chancre was cauterized and the bubo opened. The latter healed within a week. Ten days later general lymphatic enlargement appeared, together with the concomitant symptoms of syphilis. Of interest chiefly because of cutaneous manifestations. The lesions were papular and vesicular.

Viewing the plate anteriorly, we detect a conical papular eruption of average size, confined to the thighs and forearms. Posteriorly, we see scattered over the arms, thighs, and buttocks groups of minute vesicular lesions, each lesion distinct, and distended with clear serum. In no instance did their contents become purulent. The process of evolution ceased at vesiculation, thus establishing the diagnosis. During the succeeding two weeks fresh crops appeared. The lesions disappeared by absorption and by desiccation. Very few subjective symptoms attended the eruption. The case is interesting because of the chancre, a suppurating bubo, and chiefly a vesicular eruption.

* Keyes's *Genito-Urinary Diseases with Syphilis*, p. 590.





A REVIEW OF FIFTEEN YEARS' EXPERIENCE WITH TYPHOID FEVER, WITH SPECIAL REFERENCE TO TREATMENT.

BY CHARLES S. WINTERS, M.D., BINGHAMTON, N. Y.

(Read before the Interstate Homœopathic Medical Society, Scranton, Pa., October 29, 1896.)

It may seem like carrying coals to Newcastle or Scranton for the writer to offer a paper to this Society on the treatment of typhoid fever. However, the principal object will be to draw out a profitable discussion from those who have opportunities for larger experience in this disease. It is not my purpose to give a systematic treatise or a text-book essay on typhoid. *Ætiology* and pathology, however important and interesting, will be discussed only as having a bearing upon the treatment. Nor is this an attempt at an exhaustive article on the treatment of the disease. The paper is confined to personal observations, and whatever faults it may have, they are all original with the author.

It is impossible to give the exact number of cases treated. A moderate estimate would place the number at one hundred, or an average of about seven a year. This is not such a large number that it can be considered boasting. Of the whole number treated, only two cases were fatal, and these occurred in the earlier years of my practice, before the present method of treatment was fully adopted. One of the fatal cases, having been sick for some time, without care or treatment, died the second day after the writer was called to attend her. The other case was that of a man addicted to the excessive and constant use of alcoholics. In justice to our method of treatment, another fact is worthy of mention. Only one of all the cases treated by the writer passed into the hands of another physician, and that was a case running an unusually mild and uncomplicated course, which soon terminated in recovery.

I think that we should teach our patrons that typhoid cannot be aborted, or broken up, to use a popular phrase, any more than can scarlet fever or measles. Occasionally, some one of fair intelligence has said to me in reference to a case under treatment, where the placard was already on the house: "I

suppose you are trying to break it up." I think that we would make it easier for ourselves and our fellow-practitioners if we would answer such persons candidly, that the best we can do is to try to carry our typhoid patients through to a safe and sure recovery.

I find the first prescription the most difficult to make. The symptoms may be sufficiently developed to enable us to diagnose typhoid, and yet not clearly characteristic of any remedy. Bryonia is oftenest prescribed by the writer, with gelsemium, rhus tox. and belladonna second in rank. The remedy is exhibited in attenuations from 3x upward, and usually in repeated doses. The writer has tried lower attenuations and more material dosage, but with no advantage. Later in the course of the disease, when the remedy can be determined with greater accuracy, the potencies preferred are 30x and upward, and in single or very infrequent doses. A placebo is prescribed, to be administered usually every second hour. Occasionally the routine is varied by ordering it every hour for a few doses or for a certain part of the twenty-four hours. This allows us opportunity to give the remedy at whatever intervals we choose. I cannot help but deprecate the practice of some physicians in administering remedies every fifteen or thirty minutes continually throughout a course of typhoid. It is a useless annoyance to patient and nurse. A recent letter from a relative mentions her husband's illness with typhoid fever, and that she had given him his medicine every twenty minutes, day and night, for three weeks. He was under the care of a homœopathic physician.

When there are indications for a certain remedy, it is usually not prescribed at the visit in which such indications are discovered. Another day gives time for confirming the choice of remedy, when, if still indicated, it is administered in one, two, three, or, at most, four doses, in water. Improvement will almost surely be manifest in twenty-four hours. However, the remedy will not be continued or changed at the next visit, and, usually, not for several visits. When there are positive indications for another remedy, the selection is confirmed by due thought and study, and amelioration of the group of symptoms upon which the remedy was based follows. No reduction of temperature is attempted or expected except that our prescrib-

ing, with good nursing, prevents an unnecessarily high temperature. There is a normal typhoid temperature, and I am not sure but that a fever of 104° or 105° is beneficial. It may favor the natural process of leucocytosis or the development of an antitoxin that is more efficient than drugs in combating the disease. I am not sure but that the apparently improved health, noticeable after typhoid, may be due to the high temperature, the patient being purified as by fire. While I realize that the temperature is an index of the severity of the disease and complications, yet I have learned not to fear high temperature. My early experience with typhoid was in a country where it was more or less complicated with malaria. It was common for the temperature to reach 106° and 107° , and I recall one case under my treatment which had an evening temperature of 108° and a fraction for three successive days, and a morning temperature only one degree lower. This case had no serious complications, and made a good recovery in the usual time. I knew of one case in the same vicinity whose temperature was said to touch 110° , followed by recovery. Last year one of my cases had two relapses, having three runs of the fever in three months, followed by recovery. Another case, just convalescing from a moderately severe attack, began to develop a temperature, and for three weeks the typical typhoid curve was reproduced, standing at 104° for several days. The peculiar feature of this relapse was that there was not another symptom of typhoid except temperature and pulse. The patient declared that she felt well, and was allowed some solid food, which was relished, and not detrimental. Large doses of quinine had no effect on the temperature.

Later in the course of the fever, if my patient gets pretty sick, I find indications for lachesis, lycopodium, carbo veg., arsenicum, arnica, baptisia, rhus and muriatic acid. Calcarea carb. is liable to be indicated, and do efficient service, in any stage. I do not often have occasion to prescribe sulphur. Psorinum is frequently useful if sweating is profuse after cessation of fever. Since using the above remedies thus carefully selected, in potencies from 1m. to c.m., I have been able to see more positive results from medical treatment in typhoid fever cases.

A peculiarity of some of my cases last year was that an in-

intermittent fever started soon after cessation of typhoid. No characteristic symptoms being obtainable upon which to base a homœopathic prescription, quinine, in four-grain doses, was given with good results.

With this exception, sequelæ have been noticeably absent in my practice. Only one case is known to have any permanent disability from the disease. That is a case in which there was a suppurative inflammation of the middle ear, with consequent damage to the facial nerve, causing facial paralysis.

As already indicated, I have made, in a few cases, some slight variation from strict homœopathic treatment. One case having hæmorrhage of the bowels was given extract of hamamelis in teaspoonful doses. One case having frequent green mucous stools during convalescence was given five-drop doses of nitro-hydrochloric acid with prompt results after the attenuations failed. I do not give any drug as an intestinal antiseptic so-called. Any drug that might possibly be efficient, cannot help but be harmful to the patient. We must not forget that the intestinal canal has a patient attached to it. My theory is to treat the patient, not the temperature nor the localized disease process. I have never given any drug as a heart tonic, as I believe the use of such drugs to be dangerous. I notice that it is the physicians who use heart tonics who lose cases from heart failure. One case of mine having had endocarditis since acute rheumatism, eight years previously, had, during his three runs of the fever, some symptoms of heart failure; *cuprum 6x* was well indicated and carried him through safely.

Having had better results without alcoholics than others do with, I have never prescribed nor allowed my patients to use them for any supposed food or medicinal value.

I think it a safe rule to say, Take good care of the patient, and the heart will take care of itself. Its feeble action is conservative. Allow no strain to come upon the heart, in such conditions. So-called stimulants and heart tonics cause just what we should avoid. It is utterly impossible to select the indicated and curative homœopathic remedy if the patient is taking intestinal antiseptics, heart tonics and alcoholics. We have efficient remedies to meet all of these conditions. *Arnica*, *arsenicum*, *baptisia*, *carbo veg.*, *lycopodium* and *muriatic acid* as indicated, will correct the stools and control the motions in

a reasonable time. For great exhaustion and collapse we have arsenicum, camphor, cuprum, carbo veg. and muriatic acid, from which to select a safe and efficient remedy. The mention of these remedies must not be considered a parrot-like repetition of materia medica and therapeutics. I have these remedies and Hahnemann's law to thank for success in carrying 98 per cent. of cases safely through this dreaded disease, while other practitioners in the same field have lost one-fourth to one-half of all cases treated.

One of the cases in which treatment seemed to avail but little in modifying the symptoms, and yet probably facilitated recovery, is as follows: A woman forty-five years old, who was quite worn out with the care of a daughter having typhoid, was herself taken with the disease. She fell into an exhausted, unconscious state from the first. The flowing which is common in women in the beginning of the attack continued in her case for four weeks, at the end of which time the fever was gone and the patient nearly so. The anæmia was extreme and the heart's action feeble; certainly a case for stimulants if stimulants are stimulants. However she made a good recovery on the treatment outlined in this paper. She is now, at the age of forty-seven, in as good health as previous to this illness and menstruation regular.

In the early part of the disease it is my custom to have the bowels thoroughly cleared with enemata. Later in the disease, when diarrhœa prevails, I believe the same measure to be a valuable adjuvant to other treatment, though not much used in my practice. After the stage of diarrhœa there is again a period of great liability to constipation. It must be particularly guarded against by the selection of the suitable remedy and the aid of glycerine suppositories or enemata, if necessary.

The first object of bathing is cleanliness. Some parts of the body need more attention than others. The mouth should be included. The next object is comfort and alleviation of symptoms. Warm sponging is favored most in my practice. Cool water has been used when agreeable to the patient. Salt water baths are used during convalescence. A wet compress, sometimes medicated with witch hazel or arnica, is often kept over the bowels, and I presume with some advantage to the patient.

In the country it is often advisable to insist on changing the

patient to a larger and better room than the usual sleeping room. We also have the feather-bed to combat in country practice. The mattress should be changed often, or it may be convenient to change the patient from one bed to another.

The importance of nursing in typhoid would seem to be conclusive proof that a trained nurse would be a valued adjunct to the doctor. In our little town of 6000 there are no trained nurses available. One of our wealthiest families having a case of typhoid recently, sent to Philadelphia for a nurse. In a week or ten days she was discharged as a useless adjunct to the sick room, and an unnecessary expense. It relieves the doctor of some responsibility to have a skilled nurse, but the most satisfactory nurse is always a member of the patient's family. No stranger then invades the family and becomes autocrat, not only of the sick room, but of the whole house. Although fully appreciating skilled services, I have seen such noble, heroic, efficient services from the loving hands, hopeful face and prayerful heart of a loved parent, sister, brother, husband or wife, that I must also speak in their praise. Nor have I ever had occasion for serious regret in trusting such aid.

Full instructions are given during the few days of the inception of the fever, and rarely has any mistake been made. A thermometer is left with the family, by whom the temperature is taken and recorded.

Five times have I had consultation, and as many times probably have I refused it. The reason for the latter is, that no homœopathic consultant was available. This course is not to be commended, yet good luck has always been on my side.

The course of the fever in my experience has not been particularly short. Sometimes the fever runs its course in three weeks, and frequently four weeks are required before the evening temperature is normal. I have no experience in cases terminating by crisis. I have never seen the time when a few moments of heroic work turned the scale in favor of recovery. I have never seen a case in which death seemed inevitable one day, and the next day certain recovery assured. I always give a very guarded prognosis, even until recovery is thoroughly established. I have had no case of perforation of the intestine. There is undoubtedly a possibility for surgical treatment in such cases.

I allow little or no food during the course of the fever. The patients have done the best who have taken no food. Mutton broth is the least objectionable. I have found it more satisfactory not to give milk until the decline of the fever, when it is allowed very cautiously every three or four hours.

Methods of treatment are described in the journals and advertised by enterprising drug houses, that make a better showing than this which I have outlined, and which is, I believe, followed by a majority of homœopathic practitioners. And yet I notice by the published statistics, that the mass of the profession are losing from 10 to 30 per cent. of their cases. In the light of such knowledge I do not feel justified in experimenting with other methods of treatment.

THE DIARRHŒAS OF INFANCY.

BY PERCY H. EALER, M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the County of Philadelphia.)

THE alimentary canal of the infant, with its attending ailments, has been one of the most thoroughly worked of all subjects; yet few, if any, take precedence of it in point of importance. This is our apology for another presentation of the subject.

Classification.—The classification of these troubles has caused much discussion. The old pathological division, with its finely-drawn lines of demarcation, is admittedly useless in practice. Exception has been taken to the tendency latterly, among our leaders in thought, in their description of these ailments, to too much generalization. The classification of Vaughan, followed by Professor Goodno in his book, is sort of a straddle.

This classification makes four (4) varieties.

1. Acute intestinal indigestion, or simple diarrhœa.
2. Chronic enterocolitis, or chronic intestinal indigestion.
3. Acute milk infection, or cholera infantum.
4. Subacute milk infection, or enterocolitis.

The difference in the varieties being rather in degree than in kind.

We believe that the starting-point of all these cases is a dyspepsia or indigestion, chiefly intestinal, the gastric part being largely, if not entirely, reflex from the intestinal. Investigations seem to show that the stomach of an infant is of much less importance in the matter of digestion than the intestines; the stomach being but little more than a receptacle for the coagulation of milk. The younger the child, the less active the gastric digestion and the milk is passed through the pylorus undigested, the proteolytic activity of the pancreatic juice being relatively well-developed in the new-born. The absorption of fats depends upon the pancreatic juice and the bile, while the milk-sugar is digested by a ferment, found in the mucus of the small intestine.

Ætiology.—In regard to the ætiology. With our present degree of knowledge, or lack of it, it is difficult to point out in each case the distinctive or causative factor. As yet, we say, it is rather probable the derangement results from a combination of factors—of which the development of abnormal bacteria is one. But these being present in all, the healthy as well as diseased, the question arises, Where do they cross the line from the so-called physiological to the pathological state, and why?

Seasonal influence as it is called is another factor, but only one, as all cases of diarrhœa do not occur in summer. In reference to the summer diarrhœa, we are inclined to the belief that the difference is one of intensity rather than in kind, that the additional factor of heat can and does bring about quickly, in even a few hours, a degree of poisoning, bacterial or otherwise, that could not be accomplished at other seasons of the year in perhaps days, or longer; hence their danger and severity.

The ingestion of improper food, either from the mother or artificially, is another, and we think by far the most productive cause of these cases. Recently a child was brought to the dispensary aged ten (10) months, without a visible sign of a tooth, suffering from diarrhœa. Inquiry as to its diet developed that the baby was fed the same as the rest, upon meat and potatoes, ham and cabbage, etc.; the mother insisted she fed all her babies the same way, and could not understand why this one could not stand such food. Teething reflexly, through the ner-

vous system, may be a factor. In this regard, however, we do not believe that, in an otherwise healthy baby, the eruption of the teeth, which is a natural developmental process, is ever a cause of disturbance. We do not see why it, any more than the appearance of hair about the pubes, or on the face a few years later, should be a cause of diarrhœa. In babies which have been devitalized and poorly nourished from a tuberculous, syphilitic, rachitic, or worn-out and jaded mother, or fed upon ill-suited artificial food, the case is, perhaps, different; here, whatever irritability is caused by the eruption of the teeth is just one more strain put upon an already overburdened or enfeebled intestine, and thus can probably be a coincident factor in the diarrhœa.

Symptomatology.—The evidence of a diarrhœal attack is shown in the frequency and number of stools, more or less watery in character, containing more or less undigested food—this in the beginning of an attack, or acute stage or dyspeptic condition. Later, owing to the continuance of the cause, or more profound action of the poison, or greater susceptibility of the patient, the so-called inflammatory condition, the stools become mucoid, or mucus accompanied by blood; tenesmus occurs only when the rectum or lower bowel is involved.

In those cases where, in even a few hours, perhaps, the stools go through the stages, and becoming serous or bloody-serum—the so-called cholereiform attack—the poisoning, bacterial or otherwise, has been intense to a high degree, such cases occur in unfavorable surroundings, usually in hot weather, from bad hygiene, impure food or milk. This variety is claimed to be due to a special germ, but if so, it has not yet been satisfactorily isolated.

Treatment.—The handling of these cases successfully is not so easy as might first appear; on the contrary, it is often a vexed and puzzling question.

Preventive treatment we believe in first and foremost. Under this head we would suggest to ascertain the source of food supply, whether from the mother or artificial. If the former, learn how she nurses her infant, the number and intervals of nursing during the day, but especially at night. We think a prominent cause of trouble is the too frequent night feedings. Many infants are allowed to gorge themselves most of the

night, not only exhausting the mother, but so concentrating and deranging the milk as to render it entirely unfit. We deprecate the practice of allowing the infant to sleep with the mother. Too many mothers do not appreciate the necessity of taking proper care of themselves in order to properly nourish their infants. A good supply of substantial food, sufficient sleep and very much more fresh air than many get are essentials.

In reference to galactogogues, as they are called, such as drugs, malt liquors, teas, etc., we discourage their use, as it is questionable whether they are ever of service, while in many cases they are positively harmful, not only to the mother, but especially to the child. According to Foster, the quantity of milk is increased by the ingestion of proteid food, while, on the other hand, it is decreased by fatty foods. This is confirmed by an article in the *Archives of Pædiatrics* for November, in which the writer advises the use of somatose, a powdered preparation of the albuminous principles and nutritive salts of meat.

The following (Foster's) are general principles for managing disturbed lactation:

To increase the total quantity, increase proportionately the liquids in the mother's diet, and encourage her to believe she will be enabled to nurse her infant.

To decrease the total quantity (rarely necessary), decrease proportionately the liquids in the mother's diet.

To increase the total solids, shorten the nursing intervals, decrease the exercise, decrease the proportion of liquids in the mother's diet.

To increase the fat, increase the proportion of meat in the diet.

To decrease the fat, decrease the proportion of meat in the diet.

To increase the proteids (very rarely indicated), decrease the exercise.

To decrease the proteids, increase the exercise up to the limit of fatigue for the individual.

It is claimed that the variations in human milk are usually in the amount of fat or the proteids, that the sugar and other salts are practically constant. Lack of fat in the mother's

milk tends to produce constipation, while excess of fat causes diarrhoea and resulting poor nutrition. A method by which the proportion of fat and proteids can be approximated is in ascertaining the specific gravity. The average specific gravity in human milk ranges from 1029 to 1031; an excess or increase of the proteids raises the specific gravity. On the other hand, an excess or increase of fat lowers the specific gravity.

By far the greater majority of diarrhoeal attacks occur in the artificially-fed infants; hence the importance of proper food. What will constitute the proper food for each individual case is by no means an easy task to determine. Even in mother's milk, the food we are accustomed to regard as nature's supply, differences exist, in some instances more nearly resembling the average milk of the cow. While their own offspring usually thrive, many of the infants afflicted with what is popularly known as the "three-months colic" owe it to some such idiosyncrasy of the mother. The nearer we can approximate the usual normal standard, the better result we will obtain. An important point is the quantity given; in general, we think too much is given, especially in the very young. Too many do not realize that the stomach of a new-born infant will hold about one ounce. A fair guide is—

1 month old,	.	.	.	.	.	.	.	2	or	$2\frac{1}{2}$	$\frac{2}{3}$.
3 months "	.	.	.	.	.	.	.	$3\frac{1}{2}$	or	4	"
6 " "	.	.	.	.	.	.	.	$5\frac{1}{2}$	or	6	"

And an additional half ounce for each month from 6 to 12 months.

Intervals of feeding are important. Our rule is: until two (2) months old, from 6 A.M. to 10 P.M., nurse or feed every 2 hours, with one or not more than two feedings at night. From 2 months to 5 or 6 months, separate intervals to $2\frac{1}{2}$ hours, with only one feeding at night. From 6 months old, separate intervals to 3 hours, and no feedings at night.

Between these intervals give freely of cool water, or, better still, hot water. In the selection of a food we prefer some modification of cows' milk sterilized.

Prof. Rotch makes the point that, as mother's milk is an animal product, the food selected for an infant, at least during the first year, should naturally be of the same character. His pro-

cess for modifying cows' milk and regulating the amount of proteids, fat, sugar, etc., to suit each case, is the best and most scientific solution of the question of artificial feeding that has been offered. The difficulty is in its application. He has at his command a large farm, where the milk is prepared according to his instructions, and he is reasonably certain the prescriptions will be properly filled. If similar farms could be fitted up near all our large cities, we think a genuine reformation in infantile feeding would be brought about, with consequent improvement in health and lessened mortality in these diarrhœal troubles.

In reference to the proprietary foods, perhaps we are prejudiced against them, but we are inclined to think it is only in exceptional cases any of them are useful.

In the treatment of diarrhœal attacks our plan is: (1) Rest—the child at absolute rest if possible. (2) Correct the diet; if it has been on a milk diet, and particularly if the attack is in the inflammatory or choleric conditions, stop the milk entirely for 24 or 48 hours or longer, especially if the weather is hot. Give in its place barley or rice water; made one teaspoonful of the cereal to a pint of water, slowly boiled for half an hour and strained; sweeten slightly, and given in about one third or one-half the quantity of milk allowed. This should be made fresh two, or, better, three times daily.

Cool water is given often in small amounts; frequent spongings; plenty of fresh air; if possible, an entire change, either to the seashore or country.

Intestinal irrigation, we believe, is good treatment where it is needed, but if the case is seen early, the food changed and the hygiene improved, we hardly think it will be necessary. Stimulation is essential and necessary in severe cases. A preparation we have used is white of an egg, 4 ounces of water, one tablespoonful of whiskey, sweetened a little and given in teaspoonful doses every half hour or hour.

In regard to the medicinal treatment, we have adhered as closely as our knowledge permits to the indications for the use of the homœopathic remedies, and thus far have found little or no occasion to go outside of them.

Had we had our own way, this effort would have stopped right here, but our worthy chairman, Dr. Haines, insisted upon

our giving the remedies used. The following are the principal ones. The indications are what we have gone by, and while they will appear very crude to many if not all, this we plead is our misfortune.

Incidentally we remark that the little book called *Bell on Diarrhœa* has been very helpful in a number of severe cases.

Aconite 1x or 2x.—This is useful if the case is seen early enough, in the very beginning of an attack. Indicated by restlessness; thirst; dry, hot skin; colic, which no position relieves; especially if attack is apparently due to change of temperature; character of stools various.

Ethusa 2x or 3x.—Our chief indicative is the character of the vomiting, which is very forcible, throwing the milk and stomach contents away from the child like water issuing from a fire-plug. Immediately or soon after the child will take the breast or bottle again, with probable repetition of vomiting.

In the cases of cholera infantum, the child lying in a stupor or spasms, with sunken fontanelles, clinched thumbs, cold surface of the body, etc., our experience has not been flattering to *æthusa*.

Arsenicum 3x.—Vomiting and purging, so-called, at the same time. Rapid and profound prostration and emaciation, a pinched, painful expression, with a *pale*, hot skin. Great restlessness and thirst. Dr. Bell makes the point that it is the *watery stool* of arsenicum that is so offensive, not merely the putrefying contents of the bowels.

Belladonna 2x.—We use this perhaps more than all other remedies combined. In our mind it is indicated by a sudden onset, high fever, flushed face, hot head, drowsiness, but unable to sleep, with jumping and starting, rolling of head. Nausea or vomiting. Thirsty. Character of stools may be any kind, but if seen early usually the undigested stools; greenish, watery, with whitish lumps.

Borax 2x Trit.—Easily startled, apthæ upon the tongue or inside of mouth. Child pale and hot; undigested and offensive stools. Dr. Bell makes a suggestion which we think should be remembered, that belladonna is frequently given where borax should have been.

Bryonia 2x.—We think of this remedy when the child evinces no desire to be up and around. Wants to be quiet. The cases

in which there is no diarrhœa at night, while the child is asleep, but returns the next morning when it awakes, and continues during the day; also used it in the hot-weather diarrhœas, that is, those apparently due to this cause.

Calcarea Carb. 6x Trit.—In the so-called rachitic diathesis. Large, fat babies, with distended abdomen; big feeders. Profuse sweat during sleep; the character of the stool is yellow, and so thin and watery that it goes right through the napkin, leaving only a yellow stain.

Calcarea Phos. 3x or 6x Trit.—Here instead of the fat and flabby child we have the thin and emaciated, the wrinkled or “old” face, wobbling head, sunken abdomen. Stools, undigested, forcibly expelled and very offensive.

Chamomilla 3x.—In cases unusually sensitive to pain; during dentition; the *anger shown in the crying is pacified by being walked or carried*. Stools are preceded or accompanied by a good deal of colic. Stools are changeable.

China 1x.—Has been helpful in cases of chronic diarrhœa; undigested, painless stools.

Cina 3x.—In cases with whitish stools, frequently accompanied by whitish turbid urine; a high degree of anger or *irritability that is difficult to pacify*, accompanied by more or less of the popular, but falsely so-called, worm symptoms.

Croton Tiglium 3x.—This stool has three good legs to it: (1) Yellow watery; (2) during or immediately after nursing or eating; (3) sudden, forcible expulsion, “coming out like a shot.”

Ipecac 2x.—Has been useful in one or two cases of severe enterocolitis. Frequent green mucus stools, violent tenesmus, colic, and nausea and vomiting.

Natrum Sulph. 6x Trit.—In chronic diarrhœa in children, where even slight injuries to the skin cause long-lasting inflammation and suppuration, especially if it is located around the root of the nails.

MEZEREUM IN SKIN TROUBLES.—Heppetic or eczematous eruptions, with tendency to ulcerate and form scabs, from under which pus exudes. Itching intolerable, aggravated by scratching, with burning, aggravated at night and by heat. Impetiginoides eczema of the face, with formation of scabs and oozing of offensive matter.

CANCNUM ORIS.

BY F. C. BENSON, JR., M D., PHILADELPHIA.

(Read before the Trousseau Clinical Club.)

VARIOUSLY termed *cancrum oris*, *noma*, gangrene of the mouth and gangrenous stomatitis, this disease is generally found in sickly, ill-fed children, who are often in unhygienic surroundings and who are frequently convalescing from one of the diseases of childhood, measles, scarlet fever, whooping-cough; in other words, children whose vitality is below par.

Its exciting cause is a matter of some doubt, although certain pathologists, notably Schimmelbusch and Lingard, claimed to have found a bacillus peculiar to this disease, but inoculations of its cultures failed to produce any characteristic symptoms. Disease of the third branch of the trigeminus, disease of the blood-vessels, certain climatic influences and the abuse of mercury have all been given as incidental causes, but the real exciting cause remains obscure, the relative rarity of the disease and the rapidity of its course when noticed, probably precluding any systematic study of its ætiology. The first condition noticed is a phlegmon of the cheek or lip, followed by a sloughing ulcer of the lining mucous membrane of the mouth, this quickly going on to a general phagedenic sloughing of the tissues, including the lips, cheek, gums and sometimes an extensive necrosis of the jaw-bones, these conditions being accompanied by a temperature due to septic infection, prostration and generally some bowel complication.

Salivation and fœtor are pronounced. Hæmorrhage is rare, owing to the early thrombosed condition of the blood-vessels. In the majority of cases the termination is a fatal one, death resulting from exhaustion and septic infection, the mortality being estimated at from 60 to 70 per cent. When the termination is favorable, as regards life, the resulting deformity is considerable and disfiguring, and although in time cicatricial contraction would probably decrease the defect to some extent, an early plastic operation is advised. The treatment in the first place consists in giving the most nourishing food and stimulants

to the point of toleration. Locally, it has been advised that the sloughing edges of the phagedenic area be destroyed by one of the stronger caustics—nitric acid, pure carbolic, chloride of zinc or the actual cautery—after which the mouth, as well as the area of the lesion, is to be kept in as aseptic condition as possible by washes of boric acid, permanganate of potash, hydrogen dioxide, crealin, etc., and by frequent change of dressings; for beside the care of the local condition, it is necessary to guard against the inhalation and swallowing of the products from the diseased tissues, which would set up secondary infective conditions in the lungs and digestive tract. To this end it is also desirable that the patient be fed through a long glass tube, which may be passed far back into the mouth.

Early excision of the sloughing area would seem to be indicated, yet it is stated on good authority that after such a procedure the gangrenous process is prone to recur in the surrounding tissues. Of the remedies useful in this disease may be mentioned: lachesis, borax, arsenic, sulphur, sulphuric acid, nitric acid, chlorate of potash and the mercuries.

It is noticeable that the majority of writers on this subject deplore the inefficiency of our antiseptics, even the strongest, against the organisms of noma, and explain the fact by saying, that upon the wound-edges we are not dealing with the actual morbid focus; from this, it would seem to me, that a rational mode of reaching the seat of the disease is by the injection of some antiseptic into the tissues involved, and the result obtained by this method in the following case, treated in the Dispensary of the Hahnemann Hospital, warrants a belief in its efficiency.

The patient, a little girl of two years, had recently recovered from attacks of whooping-cough and scarlatina when she was brought to the clinic for treatment. She presented a brawny spot on the lower lip the size of a five-cent piece, and some superficial ulceration on the lining mucous membrane. She was given a mouth-wash of permanganate of potash, and told to report next day. On the next visit it was found that the gangrenous condition had extended so rapidly that a hole had been formed in the lip, through which it would have been possible to pass a finger. The case was now diagnosed as *cancrum oris* and treated accordingly. The parts were thoroughly cauterized

with pure carbolic acid, and the mouth-wash continued. She was given a glassful of milk containing a teaspoonful each of beef-juice and whiskey every two hours, and took lachesis internally. Notwithstanding this treatment, in three days nearly all of the lower lip had sloughed away, the lower incisor teeth were loosened, and particles of dead bone were discharged. Finding that the superficial application of antiseptics, including a strong solution of bichloride of mercury, failed to check the disease, it was decided to make use of a method of treatment by injection. A solution of permanganate of potassium, about two grains to the ounce, was used, and, under cocaine anæsthesia, the tissues of the lips and cheeks were thoroughly injected; injections were also made into the gum alongside of the loosened teeth, and the needle forced as far as possible into the diseased bone. From this time the disease seemed checked, and no further inroads were made in the tissues of the face. Two more injections were made at intervals of two days, and with the continued use of the mouth-wash, and a dressing of sublimated iodoform-gauze frequently renewed, the case continued to improve. In about ten days after the first visit the wound presented healthy granulating edges, and the teeth were firmly fixed. The loss of tissue had, however, been considerable, the lower line of teeth being exposed, causing a constant dribbling of saliva over the chin and neck, so that an operation for the repair of the defect was advised as soon as the little patient's general condition had improved. I afterward did a plastic operation on this case with good result.

MAGNESIA PHOS.—CASES.

BY CHARLES C. HUFF, M.D., HOMESTEAD, PA.

(Read before the Homœopathic Medical Society of Allegheny County, Pa., Section of Clinical Medicine, February, 1897.)

Miss B.; a tall, slender, dark-haired woman, about 23 years old. Has been suffering with facial neuralgia for two weeks past. It is located on the right side of the face, involving the superior maxillary region, and running up the side of the head and face, but not involving the eye or its appendages. Patient

sitting up in bed; head encased in hot, dry flannels, fearing to move lest the cold air may strike her face. Describes the pains as cutting, piercing, stabbing; not steady, but darting like lightning when they do come. She is very nervous, and is with some difficulty restrained when the pain is severe. Had been treated for past two weeks by a member of the "scientific" school, and had gotten no relief, apparently getting worse. My prescription was four powders of *mag. phos.*, 30x, in trituration, and that was all the medicine she received, as the pain had entirely gone when I called the next day.

Mr. S.; a small, undersized man, with dark complexion, dark hair, and very dark eyes; a hard worker, and not very well nourished. Presented himself at the office, complaining of a very agonizing pain in his face, on the right side, seemingly involving the malar bone. While waiting for me he had a severe paroxysm, and the suffering of the man was intense. He described it as boring, like an auger, and after that came pains that he could not describe, except that they were like shocks. *Mag. phos.*, 30x, was given, and he went to work the next day and has not been troubled since.

Miss C.; a tall, slender woman, inclined to angularity; brown hair, and somewhat sallow; unmarried, and about 35 years old. She has a severe attack of neuralgia in the inferior maxillary of the right side, this being very common with her. The face is swollen and very hard; sensitive to the touch, and very susceptible to cold air. The pain is sharp, darting, piercing, and changing from one part to another; can get some relief from hot, dry applications. I gave her *mag. phos.*, 30x, and called to see her next day. The pain was all gone, the swelling very much reduced, and a marked improvement was manifest. The treatment was continued, and the external conditions were all removed. She complained of a tooth that gave her some trouble, saying that it was very loose, and when she pressed down on it there was a throbbing sensation, with a sore feeling. The patient was given *silicea*, cm., and this removed all the remaining trouble, and she has since remained free from all neuralgic attacks.

Mrs. Mc.; a slender, delicate-looking brunette; very dark hair; married; pregnant four months. While suffering from an attack of influenza she had, as a complication, an attack of right-sided neuralgia, located over the eye, and involving the upper eyelid, which would twitch and quiver when the pain was severe; then lightning-like shocks from the supra-orbital region down into the upper lid were very frequent. *Mag. phos.*, 30x, relieved this case in a very short time.

I have also found this remedy very useful in disorders of the

female sexual organs. In menstrual colic, where the pains are characteristic, knife-like, cutting, stabbing, piercing, darting like streaks of lightning, and changing place rapidly, you will find this remedy very useful. If you can positively determine that the pains are ovarian, then mag. phos. will help you; but if, on the contrary, the broad ligament is involved, you had better select another remedy. Cimicifuga is a close analogue of mag. phos.

ACUTE RHINITIS.

BY H. S. WEAVER, M.D., PHILADELPHIA, PA.

(Read before the Trousseau Clinical Club.)

THIS is an acute inflammation of the mucous membrane of the nasal cavities, at times affecting one nostril, usually both, involving at times the neighboring passages, as the naso-pharynx, pharynx, larynx, also the accessory cavities, as the frontal sinus, the antrum of Highmore, the Eustachian tubes and middle ear, the lachrymal duct and ethmoid cells.

It not only involves the mucous membrane, but the submucous tissue, and is a more active inflammation than is usually found elsewhere in the body, secreting a profuse serous exudate with a serous exosmosis, giving rise to a profuse discharge. This discharge is strongly alkaline in reaction, which, according to Donders, is due either to hydrochlorate of ammonia in excess or to micro-organisms, and excoriates all the tissues with which it comes in contact. It is believed to be contagious. Hajek found and described a large diplococcus, which he termed "*Diplococcus Coryzae*," but has been unable to prove its power of producing an attack.

Persons who suffer from frequent colds or attacks of acute rhinitis, from slight exposure, soon develop a predisposition for these attacks to extend downward into the air-passages, giving rise to an acute laryngitis; and these attacks occur so frequently, not allowing one to clear up entirely before contracting another, each running its usual course, soon develops a chronic laryngitis, which is more commonly called "a winter cold."

The vitality of the larynx is thus lowered to such an extent that the patient will, years afterwards, first develop a cold in the larynx, which gradually extends upwards, giving a secondary acute rhinitis. In all these cases it would be well to examine the nasal cavities carefully for some defect which was primarily the cause of the trouble.

Pathology.—It is an acute inflammation of the nasal mucous membrane, commencing on that portion which is below par as found on the hypertrophied lower or middle turbinated bones, nasal spur or deflected septum, and spreads in all directions. At first there is a dryness of the mucous membrane, caused by a contraction of the blood-vessels, with increased circulation through the part, then a retarded circulation, with a dilatation of the blood-vessels or turgescence, the cause of which is a vaso-motor paralysis, allowing the escape of liquor-sanguineus, with a profuse watery discharge, which gradually changes its character as resolution takes place. If resolution is perfect, the mucous membrane returns to its normal condition; if not perfect, it leads to a chronic catarrhal condition.

Predisposing Causes.—I believe in the majority of cases you will find, should you carefully examine the nasal cavities, some nasal deformity, as a deflected septum, either congenital or due to fracture, septal spur, a chronic hypertrophic catarrh or a hypertrophied turbinated bone—all of which give rise to pressure on the most prominent portion of the opposite surface of the nasal mucous membrane, or simply have a sharp angle, over which the nasal mucous membrane becomes thinned or devitalized to such an extent that it will not resist the slightest exciting causes, such as sitting in a draught of air, getting the feet wet, wearing damp clothes, etc.

Chronic hypertrophic rhinitis is usually classed as a result of repeated attacks of acute rhinitis. I believe it is also a marked predisposing cause to acute rhinitis, preparing the nasal mucous membrane, by lowering its vitality, to offer less resistance to any sudden chill to which the body may be subjected, thus concentrating the systemic disturbance to this organ, which precipitates an attack.

Exciting Causes.—Exposure to draughts of air when the body is overheated, standing on damp, cold surfaces, having wet feet, wearing damp clothing—in this way causing a sudden chilling

of the whole body. Irritating gases, dusts, overheated air or chemicals frequently cause attacks.

Symptoms.—You will often find the first symptom of an attack will be a slight chill or chilly sensation, or a sneezing spell, which is soon followed by a feeling of general malaise, lasting from a few hours to a few days, depending upon the severity of the attack. After the sneezing a gradual stopping-up of the nose, which soon completely fills the nostrils, compelling the patient to breathe through the mouth. This is very distressing, especially while eating and during sleep. A burning or dry sensation, which indicates the stage of congestion; this is soon followed by a profuse, watery discharge, which inflames the nose and eyes.

This inflammation is partly due to the secretion being alkaline, and partly due to the constant wiping with a handkerchief. The discharge soon becomes thicker and whiter, and later on in the attack yellowish or greenish. Usually the patient will have some pain or pressure at the base of the nose, and if there is an extension into the accessory cavities, a heaviness or sharp pain in the frontal sinus or antrum of Highmore, depending upon the extent of the inflammation. This pain gradually lessens as the discharge increases. Some deafness, due mostly to a closure of the Eustachian tubes, from the inflammation of the mucous membrane of the vault of the pharynx, which nearly always accompanies these attacks, or there may be an extension of the inflammation along the Eustachian tubes to the middle ear, thus giving rise to middle-ear disease and very acute pain in the ear. This, fortunately, is of rare occurrence.

The sense of smell is temporarily less acute or entirely gone, also the sense of taste. There is usually some derangement of the appetite and a tendency to constipation of the bowels.

Treatment.—This I wish to divide into treatment of the attack and treatment of the nostrils during the interval of an attack.

Could we see the cases early enough, I believe the majority of them could be aborted by the use of the properly-selected remedy. I will name a few of the remedies which I have found useful in these conditions, with some of their leading indications.

Gelsemium.—Where we have a tingling, burning dryness in the nose, with violent paroxysms of sneezing, later, a profuse,

excoriating discharge, with the continued sneezing-spells, red and inflamed nostrils and eyes, marked chilly creeps along the spine, and some pressure at the base of the nose, I think in this remedy we have as near a specific as is usually found in medicine; but it is only applicable in the early stage of the disease. My mode of administration is to give one-drop doses of the fluid-extract every half-hour until four or six doses are given, following this by the third or sixth decimal dilution at longer intervals. I have frequently found one dose to be all that was needed to give entire relief.

Populus Can..—A good remedy when the symptoms soon extend to the larynx, causing violent paroxysms of coughing, hoarseness or complete aphonia, with a raw, burning sensation in the nose and throat; mucous membrane of the nose, naso-pharynx and pharynx greatly congested.

Naphthalin..—A valuable remedy later on in the disease, with a profuse, excoriating discharge, violent paroxysms of sneezing, worse in the morning; heavy pressure at the base of the nose. due to nasal congestion; eyes congested, with profuse lachrymation.

Arsenicum Alb..—Very useful where we have a copious, watery discharge which inflames the nostrils; paroxysms of sneezing, without relief of the itching and tingling. All symptoms are relieved by warmth. The patients are subject to these attacks. Considerable burning in the nose and naso-pharynx, with thirst.

Pulsatilla..—In the latter stages of the attack, where we have the profuse, thick, greenish or yellowish discharge. All the symptoms better when in the open air.

Kali Mur..—When it has become almost a chronic condition, and when there is tendency to Eustachian and middle-ear involvement.

Kali Brom..—In the very early stages, and in nervous, excitable patients, who are susceptible to the slightest changes in the atmosphere.

Sanguinaria Can..—Especially valuable when there is severe pain in the frontal sinus, due to an extension of the inflammation, nasal bones sore, pharynx dry and feels raw. Discharge from the nose is thick and streaked with blood.

Other remedies which are frequently indicated are aconite, bell, cepa, camphor, fer. phos., mere. sol., nux vom., euphrasia,

kali iod. and causticum. In addition to the internal remedies, the patient can be relieved from the difficult respiration by the use of sprays or the local application of some astringent directly to the relaxed nasal mucous membrane. Cocaine, in a 2 to 4 per cent. solution applied to the surfaces will give relief, and is justifiable in some extreme cases, but should always be used with the greatest care, not more than twice daily and by the physician himself.

Chloride of zinc, ten grains to the ounce of glycerine, makes a good application. Tannic acid in the same proportion acts beneficially.

Oily sprays used by atomizers not only contract the mucous membrane, but soothe it. Blandine comp. and a 1 or 2 per cent. solution of menthol in fluid cosmoline are among the best. These can be used several times during the first hour, less frequently as the condition improves.

Early in the attack the inhalation of camphor will at times abort the symptoms. When the nasal respiration is very difficult, especially in children, the application of cosmoline, alboline or lanoline to the nose and forehead, thoroughly rubbed in, will give decided relief.

When the acute symptoms are relieved, inquire into the patient's previous history, and see whether he be subject to these attacks. If so, examine the nasal cavities carefully, using cocaine, should you find some relaxation obstructing the view. Should you find a septal spur or a hypertrophied turbinated bone or a deflected septum, correct it and allow the mucous membrane to regain its normal tone, and you will do away with the predisposing cause.

Should you find a chronic hypertrophied rhinitis as a predisposing cause, this should be treated. The first step is thorough cleanliness of the nasal cavities. This is best done by watery sprays used by an atomizer or the Birmingham Nasal Douche, and not in the ordinary douche, as was formerly advised. The nasal improved tablets, or Seiler's tablets prepared in water, make very good cleansing agents.

Glyro-thymoline (Kress) is one of the best solutions for cleansing purposes; it cleanses, deodorizes and soothes the surface. But all these cleansing solutions should be followed by an oily spray, so as to thoroughly coat the membranes, thus

lessening the danger of contracting additional cold by cleansing the parts and allowing the pores to remain open. If this fails to give relief, then the hypertrophied tissue should be treated with the galvano-cautery knife.

Frequently you will find these patients who suffer from repeated colds are not properly dressed; this should be corrected. The neck and head should not be allowed to be so heavily clothed, which is the fashion of the day among our ladies.

Cold sponge-baths applied to the neck and chest gradually harden the skin and render it less liable to the changes in temperature.

The feet should be kept warm and free from dampness by heavy-soled shoes.

CASE I.—Mr. A. M., aged 28 years; history of very frequent attacks of cold in the head; not able to be in draught of air or be out on damp streets, even in summer, without a severe cold in the head follows. I saw him first in November of '95, and, on examination, found a marked relaxation of the mucous membrane over lower turbinated bones, with a small spur on the right side of the septum. I cocaineized the parts thoroughly, and found the nasal cavities clear back of the lower turbinated bones. I drew the sharp galvano-cautery knife through the most prominent portion of the relaxation, first on one side, and repeated it, in about four days, on the opposite side, making in all about six applications of the galvano-cautery, three on each side, being careful always to draw the knife through the relaxation on a direct line, and in the same place as the previous incision, so as not to destroy the mucous surface and to prevent unnecessary scarring of the tissue.

I then directed my attention to the small spur, on which I used the flat side of the galvano-cautery knife, making two applications. This was sufficient to remove the greater portion of it, so as not to interfere with nasal inspiration in the least. From that time up to the latter part of December, '96, he has been entirely free from cold, not even, as he expresses it, "even having a stopped-up nose." He has gained in weight, and his general health has been better than it has been for years.

CASE II.—Mr. A. W., aged 29 years; history of frequent colds, always starting in the nostril by sneezing and slight stuff-

finess of the nose, which soon developed into a complete stoppage of both nostrils, compelling him to breathe through the mouth. This would last for several days, then clear up, soon to be followed by another attack. I first saw him in the winter of '94, and, upon examination, discovered a marked hypertrophy of lower turbinated body, with considerable relaxation of mucous membrane over it. Otherwise, the nasal cavities were normal. I used the cautery knife four times in all, allowing about six weeks' time for the four applications, and up to the present time he has had only one bad cold.

In conclusion, I wish to urge the necessity of a careful examination of the nasal cavities in all cases subject to acute rhinitis.

The above cases illustrate what can be done, and the physician will feel amply repaid if he will only take time to get at the real cause of the difficulty, and treat accordingly.

THE TREATMENT OF ACUTE SPECIFIC URETHRITIS.

BY F. WALTER BRIERLY, M.S., M.D.

(Read before the Trousseau Clinical Club, August, 1896.)

PART I.

THE absolute indifference of the average general practitioner to this subject is appalling, as every man who has these cases brought before him for surgical interference can testify. I wish to enter an earnest plea for the same conscientious care for gonorrhœa which is given to typhoid fever and to pneumonia. When extra fees mean extra knowledge and ability, and when the reputable practitioner bestows the same care on the subject as his advertising competitor, the victims of youthful indiscretion or senile depravity will no longer patronize the quack specialist.

Presupposing a thorough knowledge of the anatomy and physiology of the male organs of generation, and a working knowledge of pathology and of general surgical principles, let us see if we cannot formulate some general rules for the management of acute specific inflammation of the urethra.

First of all, the patient should know that his disease will last for some time—a good average, under proper treatment, being six weeks. I am well aware of the claims of some men to

control the disease in less time, but have failed to see their claims substantiated in frank cases in actual practice. If the patient understands from the first that his disease will run a certain course, he is more contented and more apt to remain under the care of one man.

A few concise rules, easily remembered, should be given to the patient. The following routine is followed at the Hahnemann Hospital:

Never touch the eyes after handling the penis, without giving the hands a thorough washing.

Drink nothing but milk or water or the alkaline waters.

Protect the clothing by tucking gauze into the foreskin, or by putting the penis into the foot of a stocking filled with gauze, if the foreskin be short or absent.

Eat no highly-seasoned food and not much meat.

Absolutely abstain from dallying with women, and as far as possible from sensuous thoughts.

At every opportunity soak the penis in water as hot as can be borne.

Were gonorrhœa an inflammation of the mucous membrane lining some simple and easily accessible cavity like the mouth, it would be treated by the general practitioner. The fact that it is a septic inflammation in complicated organs, in other words, the fact that it is practically a pus cavity, and that its complications and sequelæ usually require surgical interference, make it a disease which is properly relegated to the surgeon.

The word *pus* gives a hint to every surgeon as to its treatment, and the fact that his germicidal mania gets the better of his pathological acumen is responsible for his repeated and annoying disappointments.

The suppuration in specific urethral inflammation is not a surface suppuration; it is a formation of pus in the follicles of the urethral mucous membrane, the irritation, though perhaps not the suppuration, extending into the connective tissue of the corpus spongiosum. Pus is present; the exciting cause cannot be removed. Accepting this as a fact, instead of stirring up the spirit of scientific ill-temper, what is the surgeon's first duty? Drainage, and the removal, as far as possible, of the products of germ life.

As is almost invariably the case in practice, the organs affected should be closely inspected at the beginning and

throughout the course of the disease. In this way complications are discovered and often met in their incipency.

If the meatus is small, it should immediately be enlarged. This not only makes future exploration of the urethra possible, but gives free exit to the great quantities of pus formed when the disease is at its height. It is surprising how many men have a congenitally small meatus. I have seen a number of cases complaining of great pain in the back, chills, loss of appetite, and other symptoms of pus poisoning, immediately relieved by meatotomy.

One of the vilest things on earth is the little wad of cotton so commonly used to protect the clothing. The pus wets it, and it forms a hard, impervious scab over the meatus. The proper thing to use is gauze, which gives free drainage as well as protects the linen of the wearer.

The bladder should be emptied as often as possible, for each act of micturition washes the pus from the urethra and prevents its absorption. The gauze is to be carried cut in small squares, and changed each time the patient urinates.

With the advent of the germ theory the opponents of homœopathy fairly howled with delight, thinking that conviction, born of law and result, would wither and die at the hypnotic suggestion that his existence was impossible. Homœopaths have almost universally claimed that there could be no action of the homœopathic remedy while the cause was still acting. This dictum will have to be modified, or we shall be driven by the accumulated facts of experience to the logical conclusion that the cause of disease is in the decreased powers of resistance rather than in the germ itself. The fact of disease self-limitation has stimulated many a fertile brain to the production of theory. Among the most interesting of these children of cerebral activity is the theory of toxin and anti-toxin. It seems that the substance which produces the profound shock, in other words, which produces the symptoms of the disease, is the very substance which limits the disease itself. Do we not help and anticipate nature in supplying a substance which produces a train of symptoms similar to the anti-toxin of the disease? No man need fear the action of a live homœopathic remedy if it is chosen, not from its irrelevant symptoms, but from those pointing to pathological relationship. Every man owes it to himself and to his patient to carefully differentiate,

and the homœopathic remedy will act if it is indicated, in spite of the presence of gonococci.

The remedies which have been most useful in my experience have been aconite, bell., gel., canth., can. sat. and tereb. Some of these remedies quickly palliate prominent symptoms; others act more slowly in their influence on nerve force and cell nutrition.

Even though we cannot sterilize the urethral mucous membrane, we can keep its surface comparatively clean. As I have already said, frequent micturition helps in this process. The various methods of irrigating the urethra with antiseptic solutions are exceedingly useful.

The same rules apply in inflammation of the urethra as in other tissues. Hot applications are exceedingly soothing, and, at the height of the disease, seem almost necessary. Rest, too, is all important in keeping the blood from the sexual organs. In the early stages, whenever the temperature exceeds 100° , the patient should, if possible, be put to bed. Absolute sexual rest must be insisted upon, and all aids to this end should be used. All stimulating foods and drinks must be absolutely interdicted.

In looking over the subject carefully, it is interesting to notice what means young folks, when together, take to add to their enjoyment. They go driving, bicycle riding or swing in the hammock, and, by friction of the nates, produce pelvic congestion. All sorts of drug action is resorted to—wine, vanilla ice cream and carbonic acid drinks, etc. The theatre and parlor sofa are not to be ignored as causes of the determination of blood to the generative organs.

Let Miles and Priscilla enjoy the tingle of capillary relaxation, and do not spoil their pleasure by pointing out with your icy, scientific finger that it is sexual excitement they are experiencing, but the man with a gonorrhœa should know that these joys are not for him.

When the stage of inflammation is over, which is usually about the end of the third week, we may use an astringent injection. The most generally useful formula in my hands has been :

[illegible]

This is to be injected, three or four times daily, with a syringe having a point like the point of a lead-pencil. The urethra is first cleansed by passing urine, then the fluid injected and held in the urethra for five minutes. If it causes much pain, weaken until it causes a gentle tingle. As the urethra becomes more tolerant, the amount of permanganate is increased.

To discuss the complications of gonorrhœa would require more time than I have at my disposal this evening. There is one so common and so direful in its results that I cannot pass it over. I refer to epididymitis. Unless immediately controlled, a double epididymitis usually means sterility. At the first slight swelling of the epididymus the patient should be put to bed. Nothing I have yet found relieves the nauseating pain like

R Tr. aconiti,
 Tr. opii, āā f5j.
 Liq. plumb. subacet. dil.,
 Aquæ, āā f5ij.—M.

The parts are to be kept moist with this until the pain ceases.

Puls., in drop doses every hour, is exceedingly satisfactory. Bell. is very useful when its ordinary indications are present. After a double epididymitis, the semen should always be examined for spermatozoa.

When the inflammatory stage of an epididymitis is over, the testicle should be well wrapped in absorbent cotton, covered with rubber protective. To hold this dressing in place, the ordinary scrotal sling is worthless. Use the handkerchief dressing, made of double gauze and eighteen inches square.

I am satisfied that if a suspensory is worn from the beginning of an attack of urethritis, thus preventing the dragging on the cord, that epididymitis is far less apt to develop.

Chordee can usually be controlled by drop doses of camph. or by painting the under side of the penis with a menthol pencil. Camphor monobromide is also useful in this condition.

Gonorrhœal bubo I wish to mention, not because of its importance, for gonorrhœal buboes seldom suppurate, but because I wish to speak of a comparatively new method of treatment. Scars from buboes are seldom seen, but, when they are seen, it is by those from whom they would most be hidden. If you can

save a man a scar in the groin, you have earned his everlasting gratitude.

The old method of treatment by free incision and curettage means a long process of healing and a scar invariably. The method of which I wish to speak is this: When pus is detected, wait until the gland is well broken down, but not until the skin is much softened. With a small sharp-pointed bistoury make an incision into the gland. The skin opening should not be more than one-eighth of an inch long. Through this opening the pus is carefully evacuated, and the cavity filled with a 4 to 10 per cent. solution of silver nitrate. This solution is to be left in the cavity. As a rule, one injection is sufficient, though the process may be repeated, if the contents should be purulent, in two or three days.

This method of treatment applies to syphilitic, chancreoidal, gonorrhoeal or traumatic buboes; in fact, to any except those tubercular in their origin, when complete excision is the only treatment.

Should this injection method fail (and I have never seen it do so), nothing has been lost, for the old method is still at our disposal.

No man has any right to discharge a patient who has had a specific urethritis until the discharge has stopped and shreds no longer appear in the urine. Every patient should be carefully examined for stricture and sensitive areas, and treated if necessary.

If the discharge persists, and it sometimes will, in spite of the most careful and intelligent treatment, no man has a right to permit his patient to marry until repeated conscientious examinations with the microscope fail to discover the gonococci.

We all, perhaps, agree with Dr. Van Lennep when he says that "gentleness is the first principle of good surgery," and gentleness is nowhere more necessary than in handling the generative organs when they are inflamed.

With the hygienic course I have laid out, the proper remedy, and the surgical measures carefully followed, we have, I think, the best plan for the safe cure of specific urethritis which is before the profession to-day.

EDITORIAL.

WM. H. BIGLER, A.M., M.D.

WM. W. VAN BAUN, M.D.

MEDICAL BARGAINS.

FROM the North and from the South, from the East and from the West goes up the despairing cry of the unofficial profession at the rampant abuses of medical charity, abuses none the less flagrant because committed in the name of sweet charity.

The statistics given of patients treated in hospitals and dispensaries in the large cities are simply appalling, and the only wonder is that there are still enough patients unappropriated by these institutions to leave even a semblance of a clientele to the outside unfortunates. The idea of charity has long since become a beautiful myth in the professional mind in connection with these institutions, but it still floats as an *ignis fatuus* before the mental vision of some men and women with a superfluity of time and money at their command. The motive at present operative in the profession is the desire for material for investigation and research, whether in connection with a medical college or a polyclinic as clinical material, or by the individual physician as a means of independent study. Experimental stations they would be called elsewhere.

This motive is, of course, particularly evident in those at the head in such institutions, while in the prestige given by a connection with them the juniors find sufficient compensation for their devotion. It is to the interest of all these parties to swell the lists of those cared for, both as a means of enticing larger donations from their friends and of claiming larger grants from the State. We close our eyes and keep silent about the more selfish motives so often alleged as actuating the physicians connected with our charitable institutions, motives of personal aggrandizement in the way of *éclat* and pecuniary profit. We do not deny their existence. Events too frequently render them so evident that not to recognize them would be to be blind or imbecile, but we are loth to believe that they are the sole or necessary incentives.

Be this as it may, the abuses remain the same and their con-

sequences—the pauperizing of the public and of the profession, together with a lowering in the public estimation of a calling which should stand pre-eminent among the others. More and more people, well able to pay a physician, are led to accept free the medical and surgical services so generously forced upon them, thus becoming unworthy objects of charity to the great detriment of their moral sense, a detriment which is apt to show itself in other transactions of their lives. The physicians are deprived more and more of the public patronage which has already been so divided and subdivided by constant accessions to the ranks of the profession as even at the best of times to hold out but poor inducements to ambitious young men. They are in consequence driven to means and methods which are, to say the least, unprofessional, but which are, in a measure, excusable from one point of view, that of self-preservation.

The latest enemy to the dignity of the profession is The Medical Supply Company, whereby the practice of medicine comes to resemble a scramble not for loaves and fishes, but for crumbs and bones. It seems to be the refuge of a still more degenerate species of the *genus* Medicus than the lodge doctor. The latter, against whom it has been found necessary to legislate in the medical societies of California, is in so far higher than this latest form of parasite in that he is merely attached to an already-existing body, as an additional convenience to its members, like an additional janitor or a new lavatory or similar annex. Some of the reputation of the order to which he is attached he appropriates to himself, whereby to gild the pittance for which he has sold his birthright.

In this latest departure, however, The Medical Supply Company, as we understand it, the intention is to get the services of the physician and surgeon, at the lowest possible figure, by a company formed for that express purpose. For a certain small weekly or monthly subscription members are entitled to draw on the company for whatever medical or surgical attendance they may stand in need of.

The company has depositories of professional skill in the shape of certain M.D.'s who are obliged to honor the drafts whenever and by whomsoever presented, to be reimbursed at a fixed low rate on presentation of a voucher that services have been rendered. Such an arrangement could only be entered

into by physicians who had despaired of being able to gain a practice for themselves by legitimate means, and who had been reduced by dire necessity, which knows no law, to do something or die. They have sold themselves.

Our constant advocacy of the widest individual liberty of thought and action is too well known for anyone to suppose that we would suggest legislation of any sort, in medical societies or elsewhere, against such action. These poor, despairing incompetents have, as individuals, perfect liberty to bind themselves to such a contract if they so please. Even the damage which such conduct is sure to work, both to themselves and to their colleagues, is not sufficient ground to warrant any interference other than moral suasion. We are opposed to the principle of "strikes," whether in a trade or in a profession. Each man's work, skill and time is worth only as much as he is able to get for them in the open market. He sets his own valuation upon them by the price at which he offers them, and the public, if properly informed, will soon learn to judge of their value by the price. Real bargains are as rare in the professional world as they are in the mercantile. An enlightened public, when the health or life of themselves or of their loved ones is at stake, will not run any risk in an endeavor to get a "bargain."

It would seem almost an impossibility to persuade the people that there is an intrinsic value in medical services while they can point to the example of so many of the highest in the profession in hospitals and dispensaries, tendering them so eagerly, *apparently* for nothing; but let it be shown that the actual returns for such seemingly gratuitous services is by no means insignificant, and the example loses its force.

The only escape from the present deplorable state of affairs, brought about by all the abuses referred to, lies, we think, in the direction of the education of the public to a full appreciation of the medical profession and its rights.

It is impossible to ignore the dominant commercial spirit of the times, and, while we are bitterly opposed to the trades-union feeling which has crept into what should be the most liberal of all professions, we can see that to adapt it to its present environment we must recognize the trend of public opinion, and, by working in more or less harmony with it, seek

to guide it. Stop at once the sharing of our knowledge with the public by lectures and shallow treatises on medical subjects. Let them be taught that the physician's knowledge and skill are his "stock in trade" (*venia verbo!*), acquired and replenished at an expense of time and money, just as any other marketable commodity, and are not, under ordinary circumstances, to be given away without adequate return. We homœopaths have unwittingly contributed much to foster a misconception of the nature of the physician's services by dispensing our own medicines. Patients have come gradually to regard the medicines given as the thing paid for. Occasionally giving for nothing medicine which had only to be repeated, and again charging for advice without medicine, are useful object-lessons.

An appeal to the common honest business sense of the public will do more to teach it its true relation to the profession than anything else. When they will have learned that it is dishonest to seek to obtain something for nothing by false pretences, and that it is just as low to sponge on a doctor for his advice as it is to sponge on any other business acquaintance; when they will have learned that the advice of a "25-cent doctor" is worth just 25 cents, and no more, and is no "bargain" and probably would not be even if given for nothing; and when, finally, members of the profession will be content to be connected with but one charitable institution at a time, then will the outlook of the general "unattached" practitioner be brighter and the millenium be not far distant.

PENNSYLVANIA'S CARE OF THE INSANE.

Up to the present time Pennsylvania has made no provision for the care of the insane for whom homœopathic treatment is desired, while, on the other hand, the State has built and liberally maintains six large asylums which are all under allopathic control. These asylums are now all overcrowded, and there is great need for an increase of accommodations. And each of these six asylums are asking the present Legislature for large appropriations for new buildings, etc.

The State Board of Charities, recognizing the call for an increase in insane quarters, and knowing the demand for homœ-

opathic care, has prepared a bill providing for an appropriation of \$200,000 to purchase land and build a State insane asylum, the medical care of which shall be in the sole charge of homœopathic physicians. And the Governor, in his annual message to the Legislature, calls attention to the necessity of providing a new asylum for the insane, and strongly urges that it should be placed under homœopathic control.

So the time has arrived for renewed and increased effort on our part to have the State of Pennsylvania, like the States of New York, Massachusetts, Minnesota, California, Missouri and others, make proper provision for the care of the insane for whom homœopathic treatment is desired.

Representing, as we do, the medical preference of a large class of taxpayers, we have the right to make such a demand, and when we can back the request by results in treatment of the insane in asylums far surpassing those of the allopathic school, our duty compels us to urge insistently our claim for recognition. The members of the Legislature will make no effort to correct this evil unless their attention is personally directed to the situation by those directly interested in such change; and it now becomes the duty of every homœopathic physician in the State to make a systematic individual appeal to the members of the Legislature, especially to those representing his home district, for the establishment of an insane asylum, to be under the sole medical care of physicians of the homœopathic school.

The State should not shower an abundance of care and provision upon one class of her citizens, as she has done at Norristown, Harrisburg, Danville, Warren, Dixmont and Wernersville, and at the same time neglect and ignore her duty to those of another class who are now compelled to contribute nearly a third of the taxes supporting these institutions without representation, thus denying the physicians of the homœopathic school their rights, and their patients the privilege of the treatment of their selection.

The members of the Legislature are honest, fair-minded men, and, as a rule, are free from medical prejudice. They willingly recognize the claims of all classes of citizens, and when they comprehend that previous legislation has created and established in power a State medicine, they will correct the evil and

extend equal protection and exact justice to all and special privileges to none. We have no desire or intention to interfere with the rights of allopathic physicians, but it is time to call a halt to their monopoly of the State medical appointments, and to ask for an equitable distribution of public patronage by the establishment of a well-equipped State hospital for the insane, to be devoted to the use of those desiring homœopathic treatment.

THE MICHIGAN HOMŒOPATHIC STATE SOCIETY.

THE Homœopathic Medical Society of the State of Michigan will meet at Lansing, May 18 and 19, 1897. This is a time of grave peril for homœopathic interests in Michigan, and every homœopathic physician of the State should attend the meeting and record again in unmistakable terms the real will of the profession. The attendance of *everyone* is urgently needed to assist in rightly ascertaining the true sentiment and wish of the profession in regard to the removal question of the Homœopathic Medical Department of the University of Michigan from Ann Arbor to Detroit.

INTERMITTENT LOCAL ŒDEMA OF THE FACE—ŒDEMA ANGIONEUROTICUM OF QUINCKE.—Dr. E. Wassiljew describes an interesting case of this disease in a soldier of 22 years, who, at longer or shorter intervals of a few days to several weeks, after preceding violent headache, would suffer from œdema of the face. Usually both cheeks were affected, together with the ridge of the nose and especially the eye-lids, which latter would become so œdematous that he was unable to open his eyes. The swelling passed without sharp borders into the surrounding normal skin, while there was no pain and throbbing in the temples. Generally the œdema would persist for a few days and gradually disappear, when the headache also would decrease. The organs of respiration and circulation as well as the nervous system were normal. The attacks recurred quite regularly, until one day convulsions supervened with loss of consciousness. He soon returned to consciousness, but with a paresis of his right arm, which only slowly disappeared. He assumes the œdema to be of angioneurotic origin, as several nervous diseases had been noticed in the patient's family. The unconsciousness with convulsions he ascribes to a similar condition—an angioneurotic œdema of the cerebrum.—*Wiener Medizinische Presse*, No. 44, 1896. [Osler, *Practice of Medicine*, p. 989, states it to have affinity with the giant form of urticaria. The disease is quite hereditary. He has reported a family where five generations had been affected, including twenty-two members. Severe colic is sometimes associated with the outbreak.—F. H. P.]

GLEANINGS.

TWO CASES OF SYPHILIS OF THE BRAIN.—Dr. W. Gajkiewicz (Poland) considers syphilitic lesions of the convexity of the brain as rare forms of that disease. He records one case of that variety and a second with a rare localization at the pons varolii.

1. A man of fifty-three years who denied syphilis, three weeks before entering the hospital had had spasms in his left lower extremity; eight days after this a second one followed, which involved both lower extremities and the left side of his face; then they became general, with loss of consciousness. During the following days the attacks were lighter. When examined his lower limbs were markedly weak; on the left leg there were characteristic gummata. Diagnosis: *Circumscribed gummatous meningitis in the region of the motor centre of the left lower limb.* Antisyphilitic treatment was instituted, and he recovered completely.

2. A man of thirty-eight years, who had contracted syphilis six years before, and undergone mercurial treatment three weeks before entering the hospital, suffered from violent headache, without definite localization. Six days later he was seized with vomiting, and loss of consciousness. When he was examined he was conscious, but enervated; the movements of the left lower limb were feeble; walking was impossible, as he could not keep his balance. The muscles of the right side of his face were wholly paralyzed. His right eye presented a convergent strabismus. The next morning a complete paralysis of his left arm supervened; as to the lower extremity, he was able to rotate it slightly outwards. He could not flex his knee, but once flexed he could extend it. Spasms of the affected muscles were noted. His left pupil was larger than the right; his facial muscles reacted neither to the faradic nor galvanic current. Sensibility remained intact. Treatment with mercury and iodine brought about a slow and progressive improvement. At the end of two months he was able to stand alone; if supported he was able to walk; the movements of his left arm became better; the muscles of his face were still slightly weak, but they reacted well to the electric currents. In short, there only remained certain spastic symptoms and a weakness of his facial muscles. As the paralysis of the limbs was on the opposite side to that of the facial muscles—facial and abducens nerve (syndrome of Millard-Gubler), it was an alternating one, therefore the seat of the lesion was at a point between the decussation of the nerves for the limbs (decussation of the pyramids) and the root of the facial nerve (lower portion of the protuberantia). The lesion therefore compressed (1) pyramids, giving rise to a paralysis of the extremities of the opposite side, and (2) the roots of the sixth and seventh cranial nerves—abducens and facial—with a consequent paralysis of these nerves. It was of a peripheric character, as disturbances of sensibility were lacking. The lesion must have been superficial and of a gummatous nature on account of the previous history and the results of specific treatment.—*Przegląd Chirurgiczny*, tom. iii., zeszyt. i., 1896.

DISEASES OF THE SPINAL CORD FOLLOWING WHOOPING-COUGH.—Prof. Bernhardt (Berlin), in a paper read before the Society for Internal Medicine of Berlin, after mentioning the cerebral disturbances, as hemiplegia, aphasia, psychoses, diseases of the organs of sense and cranial nerves, which have followed pertussis, points out the rarity of spinal affections after this disease. He has recently observed such a case in the daughter of a physician, who at the age of 5 years contracted whooping-cough in February, 1892. On the tenth day, after a violent fit of coughing, the child lost control over her lower limbs; she could neither walk nor stand. Fever, spasms and disturbances of consciousness were absent. The upper extremities were uninvolved and the cranial nerves intact. The tendon-reflexes of the legs were exaggerated, sensibility somewhat diminished; there was also a slight disturbance in urination. In four weeks amelioration was noticeable; the right leg could be lifted and flexed. In the summer of 1892 she could begin to walk. During the winter of 1893 a double parotiditis appeared with an aggravation of the spinal symptoms. Since 1895 she is able to attend school, but the exaggerated reflexes and the disturbance of the bladder are still present. Now she is wholly restored to health except that her right foot easily turns in, and after a long walk she drags her right foot. There is neither muscular atrophy nor alteration of the electric reaction.

The writer explained the symptoms by a hæmorrhage into the spinal canal—a hæmatorrhachis. Hæmorrhages appear with whooping-cough under the most varying forms; even an apoplectic form hæmorrhage into the substance of the cord might have been present in this case. Hemiplegia during pertussis has been found often to be of apoplectic origin. Possibly the condition might have been due to bacterial infection, as has been described by Oppenheim in influenza.

In the discussion Prof. Leyden looked upon a hæmorrhage as more probable. He has three times observed hemiplegia in adults during pertussis. Drs. Heubner and Baginsky cautioned against jumping to the conclusion that an anatomical substratum underlies these cases; hysteria is sometimes at the bottom.—*Berliner Klinische Wochenschrift*, No. 45, 1896.

FRANK H. PRITCHARD, M.D.

THE PHONENDOSCOPE.—Egger (*Munch. Med. Wach.*) has made investigations concerning the use of Bianchi's phonendoscope. Bianchi contended that with this stethoscope no vibrations are lost, while the sounds are not exaggerated as by the microphone. The phonendoscope is not only of service in mere auscultation, but the outline of the organs can be mapped out by its help. The author's experience is not so favorable as that of Bianchi. A number of extra sounds are liable to be produced which are troublesome, such as that made by the shaking of the tubes or by the slightest touch of the ebonite plate or metallic case. The heart-sounds are heard with greater loudness and over a more extended area than with the ordinary stethoscope, but when only one tube is used the limit is the same for the phonendoscope as for the hollow stethoscope. The increase in the sounds is useful for those who are deaf, but it is doubtful whether it is of any advantage to those with the ordinary acuteness of hearing. The hearing of the heart-sounds over the apices of the lungs is undesirable. Bronchial breathing and some moist sounds are not intensified by the phonendoscope. Sometimes the metallic

clang is not transmitted by this instrument. Some over-tones are conducted badly or not at all by it. A difference thus exists in the transmission of certain sounds.

The author then relates his experiments to show that deep tones are intensified by the phonendoscope, whereas the higher tones are weakened or not heard at all. This explains the disappearance of metallic sounds and the higher tympanitic sounds. Rhonchi are intensified, but consonating râles are weakened. By the difference in the number of vibrations the author explains how vesicular breathing is relatively well heard, whereas bronchial breathing is heard with varying distinctness. Bianchi's contention, that the *timbre* of the sounds is not altered, is incorrect. Moist sounds produced immediately beneath the chest-walls may appear metallic, and the author relates experiments to prove this. Thus in auscultation the sounds may be altered in two directions: (1) The metallic clang may be lost; or (2) sounds may appear metallic which are not really so. Murmurs may also be altered in their intensity, being sometimes intensified and sometimes weakened. The phonendoscope may be useful in differentiating murmurs in complicated valvular lesions, and in distinguishing between endopericardial and pericardial sounds. The author is skeptical as to whether organs can be correctly mapped out with its assistance. The convenience with which the instrument can be used, and the fact that several people can listen at the same time, are advantages; but notwithstanding this, the author does not think it can replace the ordinary stethoscope. —*Dominion Medical Monthly*.

THE PROGNOSIS OF PNEUMONIA.—Dr. William Osler states that the toxæmia outweighs all other elements in the prognosis of pneumonia (*Amer. Jour. of Med. Sci.*, No. 297). Wells, of Chicago, in a paper on pneumonia, has grouped together statistics showing the death-rate of the disease. Of 233,730 cases the mortality was 18.1 *per cent*. Age is an important factor. The old are likely to die, the young to recover. The disease appears to be much more fatal in the negro than in the white. Previous habits of life and the condition of bodily health at the time of the attack form most important factors in the prognosis of pneumonia.

In twenty-five of Dr. Osler's autopsies at the Montreal General Hospital, the kidneys showed extensive interstitial changes. Individuals debilitated from sickness or poor food, hard drinkers, and that large class of hospital patients composed of robust looking laborers between the ages of 45 and 60 whose organs show signs of wear and tear, and who have, by excesses in alcohol, weakened the reserve power, fall an easy prey to the disease. Very few fatal cases occur in robust, healthy adults. Some of the statistics given by army surgeons show better than any others the low mortality from pneumonia in healthy picked men. The death-rate in the German army in over 40,000 cases was only 3.6 *per cent*.

Apart from certain complications, the fatal event in pneumonia may result from a gradual toxæmia, or from mechanical interference with the respiration and circulation. The toxæmia is the important element in the disorder, to which, in the majority of cases, the degree of pyrexia and the consolidation are entirely subsidiary. The poisonous features may develop early and cause from the outset severe cerebral symptoms, and they are not necessarily proportionate to the degree of lung involved. There may be severe and fatal

toxæmia, with consolidation of only one-half a lobe, while a patient with complete solidification of one lobe, or of a whole lung, may, from beginning to close of the attack, have no delirium. Many of the cases which show the most profound toxæmia present variations from the topical picture; thus there may be no cough, no expectoration, very slight fever and no leucocytosis.—*A. J. M. S. Bull.*, February 25, 1897.

F. MORTIMER LAWRENCE, M.D.

SURGICAL HINTS.—Look out for your assistants, and hold them equally responsible with yourself for any mishap. A furuncle of minute size on the hand of an assistant may cause the failure of an otherwise perfect piece of surgical work.

It is a mistake to constipate the patient for more than forty-eight hours after the operation for hæmorrhoids by clamp and cautery. When the bowels do not move by oil and soap-suds enæma see that some one is with the patient to act in case of syncope.

High temperature is not a necessary feature of appendicitis. A case may run the whole gamut of perforation, abscess, peritonitis and death while the thermometer never exceeds 99 degrees Fahrenheit. The pulse is a much safer guide.

Cotton or linen thread boiled for a few moments in 5 per cent. carbolic watery solution makes a useful suture or ligature-material in an emergency. It is, of course, not so strong as silk or catgut, but is quite non-irritating, and may safely be left in a wound as a buried ligature or suture.

When a mass of tissue has been removed from the soft parts in an aseptic operation it is well, by means of sutures, to obliterate as much as possible of the vacant space, bringing its walls everywhere into contact. If this is not done the defect fills with clot, which forms a tempting feast for the germs of putrefaction.

In operating for hæmorrhoids by clamp and cautery be sure you clamp the tissue in radiating folds, so that the eschars shall be to the anal centre as the spokes of a wheel to the hub. Subsequent stricture is thus avoided. Do not include too much tissue, for the cautery often burns deeper than one might expect. Only the pile-bearing mucous membrane should be burned. If it is desired to remove the external or skin piles, it may be done by ligation, previously incising through the skin to avoid the pain of the constricting ligature.

In estimating the character of a new growth one should never depend wholly upon the microscope. Clinical observation is far more important, although in case of doubt the histology, as revealed under the lens, may turn the scale. In the present stage of medical science it would be poor surgery to condemn the limb or an organ, or to perform an operation which would imperil life, on the uncorroborated evidence of the microscope, while a tumor histologically benign, though clinically malignant in its course, should be extirpated as thoroughly as if the pathologist's report had been unfavorable.—*International Journal of Surgery.*

HERBERT L. NORTHROP, M.D.

THE VAGINAL RADICAL OPERATION. (L. Th. Landau).—The credit of discovering extirpation of the uterus as a method of treating pelvic suppuration belongs solely to Péan.

(1) There should be strict differentiation between one-sided and double-

sided affections, between unilocular and multilocular gatherings. The uterus should be removed only when the appendages have suppurated and been destroyed on both sides.

(2) In unilateral recurring multilocular suppuration incise the abscess according to situation through the vagina or the abdominal walls and save the healthy side.

(3) Try incisions alone in bilateral unilocular abscesses. This attempt to cure (even in pyosalpinx duplex unilocularis) if unsuccessful does not prevent other operations which may become necessary later and may preserve, eventually, important functions.

(4) In bilateral disease and multilocular suppuration (multilocular pyosalpinx duplex, tubal suppuration with intra and extra peritoneal formation of abscesses, etc.), where extirpation of both appendages, whether by the abdominal or vaginal method, cannot be recommended, as the operation does not guarantee permanent cure. The extirpation of the uterus and the appendages, that is the vaginal radical operation, is to be preferred here, as well as in bilateral disease where, in addition to suppuration of the tubes or ovarian abscesses, there may be fistular connection with other organs.

The writer concludes, from the large amount of material under his observation in Berlin, that total vaginal castration (vaginal hysterectomy) gives decidedly better results than abdominal castration. The immediate favorable results of the former operation is of less importance than the permanency of cure. The writer regards the uterus in this operation as a quantité négligeable, which is removed for the purpose of drainage, for the same reason as a piece of healthy rib in emphyema or a piece of the skull in draining a cerebral abscess.

The writer differs in two points from the technique of Péan and Legond. He employs palpatory puncture as well as palpatory enucleation in the peeling out of the diseased adnexa. The second point is that bleeding is not controlled until after complete extirpation of the diseased organ, as all portions of the womb can be then made visible, as clamps applied previously are in the way of the operator.—*Centralblatt für Gynäkologie*, No. 1, p. 14, 1897.

CLINICAL OBSERVATIONS ON ECLAMPSIA—Knapp (Prague).—He reports twenty-two cases from the University Clinic at Prague from October 1, 1891, to March 1, 1896; 9.1 per cent. were during pregnancy, 68.18 per cent. during labor, and 22.72 per cent. during the puerperal period. Albumin was present in all cases in greater or less quantities during the attacks after quantitative analyses after the methods of Esbach or Brandberg. Albumin in the urine was found in twelve cases previous to the convulsion. In four cases there was nephritis in pregnancy. Pathological form elements: Hyaline, granular, epithelial, drops of fat, or partly fatty degenerated cylinders, and cylinders of only white blood-corpuscles were found in sixteen cases. There was no microscopical report in two cases, and in two cases the absence of cylinders was especially emphasized.

No conclusions can be drawn from the condition of the urine on which the prognosis of eclampsia can be based. A previously-existing nephritis requires careful prognosis. The frequent appearance of red corpuscles detached or in cylinders, during or after a convulsion, is a symptom of an acute irritation of the kidneys. Twenty out of twenty-four children were born alive. Premature

labor was induced twice. The forceps applied eleven times, and perforation performed four times. The method of treatment consisted in rapid but careful delivery, and all operations, even of the simplest kind, were performed in deep narcosis. Besides chloroform in Billroth's mixture (A. C. E.) chloral hydrate was used by the mouth or as an enema. Morphine was used subcutaneously as an opiate in large doses in the beginning, and small doses afterward frequently repeated; also protracted warm baths, the wet-pack and large fluid enemata to excite the secretion of urine. He recommends kolpeuryisis as effectual in aiding rapid delivery.—*Ibid.*

GEORGE R. SOUTHWICK, M.D.

CHRONIC SIMPLE GLAUCOMA.—Richey, after stating that in his opinion most cases of glaucoma are directly or indirectly due to the gouty diathesis, says, under the head of "Local Treatment," based on the hypothesis that intra-ocular tension is due to venous stasis, he uses a frequent collyrium of eserine, varying in strength from 1-1000 to 1-4000, repeated until myosis is produced. While using eserine, he also employs light taxis, using the two index fingers, pressure being light and alternating in character. He claims by this method to have reduced the tension in a great majority of his cases. To retain the myotic influence for weeks he uses a solution 1-8000. In cases of extreme high tension not relieved by this method he uses local blood-letting by leeches.

Under the head of "General Treatment," besides the use of the myotic, in acute glaucoma, he employs the hot-bath repeated after a few hours. In chronic glaucoma he states that the bath should not be taken except in hot water, and should be repeated several times a week, always using a tub bath and immersing the whole body.

The other therapeutic means employed are: A mixture of sodium salicylate, ammonia and taraxacum, which should be pushed to their physiological limits. In irritable glaucoma he advises the use of colchicine. The intestinal tract is washed out with Hunyadi-Janos mineral water. In cases of hepatic torpor he recommends the use of calomel in divided doses and nux vomica as a stomachic tonic.

In conclusion, the author states that he has observed cases for a period of ten or twelve years in which the halo-symptoms have persisted, refraction increased, excavation deepened, but little or no loss of visual acuity, no contraction of field.—*Annals of Ophth. and Otol.*

INTRACRANIAL AFFECTIONS ORIGINATING IN THE EAR.—Professor Gruber, of Vienna, brought before the Austrian Society of Otology an analysis of 40,073 deaths, in the Vienna General Hospital, in order to elucidate various points in the relation of ear disease to intracranial affections. Of this total number of cases, 1806 died of intracranial disease. Of these latter, 232 were the result of ear disease, or about 12 per cent. of the deaths caused by intracranial disease, and .58 per cent. of the total number of deaths. Suppurative otitis media was complicated with caries in 167 cases; it occurred alone in 65 cases. The venous sinuses were involved in 148 cases, 42 occurring in cases without caries and 106 with. The transverse and sigmoid sinuses were those mainly involved. Of the 17 cases of otitis with thrombosis, 16 died of pyæmia. When caries was found in association with otitis and thrombosis, there were 32 deaths from pyæmia out of 40 cases.—*Revue de Laryngologie.*

CHARLES M. THOMAS, M.D.

MONTHLY RETROSPECT

OF HOMŒOPATHIC MATERIA MEDICA AND
THERAPEUTICS.

THE THERAPEUTICS OF SIMPLE-CONTINUED FEVER.—Fornias suggests the following as leading remedies :

Aconite at the outset, to control arterial excitement with much restlessness and anxiety, especially if the skin is hot and dry. *Belladonna* if the brain becomes involved and delirium and stupor attend its operation. *Bryonia* if on account of pain, especially headache, there is shunning of all motion, with constipation and decided thirst for large quantities of water. *Ipecac* meets well the gastric state, with persistent nausea and vomiting. *Nux vomica* corresponds to that bilious state, attended by obstinate constipation and irritable mood. *Pulsatilla* if there is adipsia and bitter, sour eructations, with loose mucus stools, especially if the trouble is due to indulgence in rich food (fat or pastry). *Mercurius* if the general condition is worse at night, or after being in bed, with unrelieving sweat, lassitude, soreness or aching in the bones. *Glonoine* after exposure to the sun, with throbbing headache and violent action of the heart. *Gelsemium* when the fever is intense, approaches the remittent type, and is attended by creeping chills, mental dullness and muscular soreness and weakness. *Arsenic* for hypothermic cases, with marked irritability of the stomach and intolerance for much water during the violent thirst, or adynamic, with nocturnal inquietude. *Sulphur* in typhoid cases, with persisting dry heat and increasing mental dulness, as if assuming a low type.—*N. A. J. of Hom.*, March, 1897.

THE SPHERE OF ACTION OF IGNATIA.—According to Pierson, of Chicago, this is not a deep-acting remedy and therefore is not indicated in deep-seated, long-lasting, chronic diseases. As a general rule the reason for the profound sadness, uncontrollable grief or evidence of severe disappointment will be found in those who have inherited an amiable disposition, highly-developed feelings, delicate conscientiousness, intense affections, and consequently very susceptible to every wind that blows. With these highly-wrought constitutions you find exceedingly favorable soil for the development of extreme sensitiveness of the nerves and that hydra-headed monster, hysteria. It will be noted that this peculiar alternating characteristic may lead the physician to select this remedy for seemingly opposite conditions, but in these cases the totality of the symptoms must show the tendency of the patient to pass rapidly from one extreme to its directly opposite condition. As a general thing the early part of the day is the best time for the administration of this remedy, because if given later in the day it is liable to disturb the sleep of the patient, and you will be favored by the patient in this particular from the fact that she will consult you as a general thing during your morning hours, or you will be called to her bedside during the latter part of the night. In this con-

nection it may be well for you to bear in mind that, as a general thing, the *med.* patient should receive medicine in the latter part of the day in order that the morning hours may be free from discomfort or actual suffering.

With this general survey you will be impressed with the fact that the symptoms or the absence of symptoms are entirely out of proportion to the apparent exciting cause. For example, there may be a very apparent source of irritation and profound shock or an extensive injury, and this sensitive individual will seem to be so dazed as to give little evidence of the suffering that would naturally be expected under the circumstances. The very next individual for which the remedy is indicated may disclose no apparent cause for the suffering and still the expression be so great as to lead sympathizing friends to think that death would be the greatest blessing that could come to them. In each of these cases wherein the hypersensitiveness of the nervous system contains the cause for either the absence of suffering or the intensity of the same, *Ignatia* will frequently cover the totality of symptoms, the seemingly irrational, unexpected expressions being the key-note for this selection. If these patients have a fever, as a general thing there is absence of thirst and a desire to be carefully covered; if, on the contrary, they have a profound chill, they will want all the covers removed and possibly an intense thirst for large quantities of water. Mentally the same irrational symptoms will be clearly marked. Unreasonable complaints about light, noise, motion, heat, cold, attention or lack of attention are usually offered in a sad, plaintive manner; or else, in profound cases of melancholy, the result of intense grief or great suffering, the patient will meet all inquiries with a dull, vacant stare. This brief analysis will give you a picture of the sphere of action of the drug. *Hahn. Advocate.*

A CASE OF PERNICIOUS ANÆMIA CURED BY ARSENIC.—Arnold reports the case of a man, æt. 63, who consulted him in reference to a condition of progressive debility, accompanied by breathlessness and a peculiar pallor. He suffered much from weakness, his complexion was of bright lemon-yellow color, with lips and palpebral conjunctivæ extremely pallid; extremely thin, though not more so than usual; no pain, some œdema about the ankles, appetite poor, bowels constipated; urine high colored, sp. gr. 1020, and containing a trace of albumin; on standing it deposited a reddish-brown flocculent matter, which, under the microscope, appears entirely amorphous. Examination of a specimen of blood showed that a large proportion of the red corpuscles were markedly distorted in shape, with some megalocytes and microcytes present, and careful examination showed distinct and active movement on the part of the distorted corpuscles. There was no protrusion of pseudopodia and change of shape on the part of moving corpuscles. Iron had been given without the slightest benefit.

Pernicious anæmia was diagnosed and the patient was given *arsen. alb.* 3x gtt iij ter in die. A week later, no change being perceptible, the dose was increased to gtt v t. d. A few days later he was a little better, and was given *arsen alb.* 1, gtt. ij ter post cib. This was followed by marked improvement both in the symptoms and the appearance of the blood. This continued for over two months, when he was apparently well, and six months later the patient was in more robust health than for years before.—*Monthly Hom. Review*, February 1, 1897.

THE HOMŒOPATHIC TREATMENT OF AFRICAN MALARIAL FEVERS.—An address on the above topic was delivered on November 16th, by Dr. J. W. Hayward, before the members of the African Trade Section of the Liverpool Chamber of Commerce.

For the prevention of attacks, after any extra exposure to malarial influence, he recommended a dose of *sulphur* every two hours for two or three days; if the increased liability resulted from error in diet, they should take *nux vomica* if after alcohol, especially if there were constipation, and particularly in dark-complexioned, passionate men; or *pulsatilla* in the absence of constipation, especially after pork or other fat food, and particularly in fair-complexioned, mild-tempered persons.

Premonitory Threatenings.—Shivering, lassitude, headache, backache, slight feverishness, etc. If shivering is the most predominant feeling, even if there is headache, give *camphor*, three drops on a bit of lump-sugar, and this afterwards dissolved in a dessertspoonful of clear, cold water, every quarter hour for four to six hours. If lassitude, backache and general pains are the most prominent symptoms, instead of *camphor* give *bryonia*. If headache, and the headache is *severe* and of a throbbing character, give rather *belladonna*. If the headache is sharp and springing and there is constipation, and especially if backache is severe, with dread of movement, give *bryonia*. If the symptoms resemble those of *bryonia*, but the pains make the patient move about, instead of *bryonia* give *rhus toxicodendron*. If the symptoms are really intermittent, subsiding and returning periodically, give *chininum*.

The fully developed fever, Dr. Hayward would treat according to its type, as follows:

Head Cases.—If it is evidently a headcase and there is cerebral excitement, with raving delirium, etc., give *belladonna* every two hours, one hour, or half hour, according to the urgency; but if it is one more of a congestive variety, with muttering delirium, etc., give *hyoscyamus* in the same way instead of *belladonna*.

Liver Cases.—If the patient has a jaundiced appearance and there is vomiting of bilious or greenish matter, give *bryonia* every two hours, one hour, or half hour, according to the urgency.

Stomach Cases.—If there is much nausea with vomiting, especially if the vomited matter be slimy mucus, and particularly if streaked or stained with reddish blood, give *ipecacuanha*. If, rather than nausea, there is urging and straining with the vomiting, and blackish or coffee-ground vomit, give *phosphorus*.

Hæmorrhagic Cases.—If, notwithstanding the above-directed treatment, the case becomes, or if from the beginning it is, truly hæmorrhagic, if the hæmorrhage (in the vomit, urine, etc.), is reddish or brownish, give *ipecacuanha*. If the bleedings are blackish or like coffee-grounds and there is unquenchable thirst, give *phosphorus*. But if the blood seems dissolved in the vomit or urine, as if the blood-cells were broken up, give *crotalus*.

Black Water Cases.—For real black water fever, especially if the coloring matter in the water tends to settle to the bottom like coffee-grounds, and particularly if there is unquenchable thirst and some urging to urinate though the urine is scanty or arrested, give *phosphorus*. But if the general appearance shows signs of putrescence, and in the bleedings the blood seems liquid, as if the blood-cells were dissolved, give *crotalus*.

If the temperature is high—over 103° F. in the evening—in any case give *aconite* alternately with the medicine that is being given; cease the *aconite* as soon as the temperature comes down below 101° F. Shivering and rigors, especially in the early stage of the fever, must be met with *camphor* every ten or five minutes until arrested. If the case does not fall under one of the above types, or if, notwithstanding the above-directed treatment, the patient appears to be sinking of absolute exhaustion, especially if the temperature becomes subnormal, give *arsenicum*.

Complications.—If during the fever pleurisy supervenes, give *bryonia* alternately with the other medicine. If pneumonia supervenes, give *phosphorus* alternately with the other medicine. If bronchitis supervenes, give *ipecacuanha* in the same way.

Dregs Left Behind.—For irritability of stomach, give *pulsatilla*, *ipecacuanha* or *arsenicum* according to symptoms. For indigestion give *nux vomica* or *pulsatilla*. For biliousness or chronic jaundice, give *bryonia*, *mercurius dulcis* or *sulphur*. For diarrhoea, give *mercurius dulcis*, *veratrum* or *arsenicum*. For chronic dysentery, give *mercurius corrosivus*, *belladonna* or *rhus toxicodendron*. For chest affections, cough, etc., give *ipecacuanha*, *bryonia*, *phosphorus* or *sulphur*.

Dr. Hayward also referred briefly to the therapeutics of a number of other diseases of hot climates, including sunstroke, acute dysentery, Asiatic cholera, etc. The address is to be issued in pamphlet form and distributed on the West Coast.—*Hom. World*, March 1, 1897.

HYDROBROMIC ACID IN AURAL VERTIGO.—Wright states that his own experience with this drug is very small. It was first introduced to the profession by Dr. Woakes, who considered that its action was opposed to that of quinine, and that it had a specific effect upon the inferior cervical ganglion, increasing the tonic action of the sympathetic, and thus promoting vaso-constriction. He found it gave great relief to headache, tinnitus, and vertigo, when given in doses of twenty minims, especially in cases of vasomotor disturbance of stomach origin. Dr. Winslow, of Pittsburg, made a proving of this drug on himself, taking a few drops at intervals during the day until half a drachm had been swallowed. Dryness and puckering of the throat were produced, followed by a feeling of constriction in the pharynx and chest. It seemed as though he was about to have asthma, but the breathing continued uninterrupted and rhythmical. The head and face were hot, the brain had a dull ache, and waves of heat rushed over the face and neck, but the skin did not show any increase of vascularity. A decided ringing, non-pulsating tinnitus with slight vertigo on moving the head up or down followed later on in the day. The heart-beats were accelerated, and there was some palpitation, and the arms had a dragging heaviness and dull aching which made them seem as though they were not part of the body. He likened the sensations to those produced by a too free use of tobacco. Next day some irritability of the stomach and heart and heaviness of the arm remained, but by the third day pathognomonic symptoms had disappeared. He reports that its use in cases of tinnitus, nervousness and cerebral strain in drop-doses every three hours had been successful in his practice.

The above symptoms show that the drug certainly influences the circulation of the head, neck and arms; that is, the parts whose vasomotor nerves are de-

rived from the cervical sympathetic. As before stated, the upper limb receives its nerves from this source, and it is known that venous congestion of any part, such as is brought about by dilated arterioles (vaso-dilation), owing to the pressure exerted upon the nerves by the dilated vasa-nervorum, will cause symptoms of perversion of function in the affected parts; such symptoms—we have it on the authority of Dr. Woakes himself—being mainly sensations of heaviness, dragging and dull aching.

It is therefore interesting to note that in the latter part of the above proving these identical symptoms occurred, which makes it seem likely that, although the primary effect of the drug may be as Woakes states, antagonistic to quinine, viz., that of a sympathetic stimulant, if we may use such a term, its secondary or late effect may be exactly the reverse. There is nothing very improbable in this, as it can be abundantly proved that the majority of stimulants produce secondary depression.

Under these circumstances, Hydrobromic acid is not very far from being homœopathic to vertigo having its origin in reflex labyrinthine vasodilation.—*N. E. Medical Gazette.*

THERAPEUTICS OF MELANCHOLIA WITH STUPOR.—In addition to general dietetic and hygienic measures, Butler, of Brooklyn, recommends the following remedies :

Baptisia.—Aversion to mental exertion, confusion of ideas and inability to concentrate the mind. Perfect indifference ; does not care to do anything. Stupor ; falls asleep when being spoken to or answering. Sleeps well until 3 A.M., is then restless until morning. Restless, with frightful dreams.

This remedy has achieved its best results in the cases of melancholia with stupor which, from the rapidity of the pulse, the abnormally high temperature, and the very high respiration, seemed hopeless. In these cases we find the dull, besotted face, the intensely fetid breath, dry, brown tongue, sordes on the teeth, strongly offensive stools, and the general symptoms characteristic of the typhoid condition.

Calcaria Carbonica.—Mind confused, intellect dull, thinking difficult. Forgetful, sleepless or unrefreshing sleep. Circulation poor, feet and legs cold and damp ; pale, weak, poorly nourished.

While not rich in mental symptoms, we have made some prompt and perfect cures with *calcaria carbonica* when its general symptoms were present.

Calcaria Phosphoricum.—Forgetful, dull, stupid, indifferent, drowsy, gloomy, unable to think ; cold extremities, poor circulation.

This remedy is very similar in its symptomatology to *calcaria carbonica*, but is especially adapted to young persons with dark hair and dark complexion, while *calcaria carbonica* has an affinity for blondes.

Conium.—Dull, stupid, forgetful, unable to sustain any mental effort. Great nervous prostration ; vertigo when lying down or turning over in bed. Trembling of limbs, sensation of weakness in back and limbs, with great exhaustion and numbness.

Especially useful in the aged, or when the mental trouble has followed some severe disease or been produced by irritation of the sexual organs caused either by masturbation, sexual excess or continence.

Gelsemium.—Dulness of the mental faculties with loss of mental concentration. Melancholy, despondent, does not wish to speak or be in the

proximity of any one. Drowsy, but cannot sleep; general nervous prostration.

Useful in the young and where the disease has been caused by any sudden mental shock.

Helleborus Niger.—Dull, stupid; stares unintelligently; cannot fix ideas; slow in answering; diminished power of mind over body, so that muscles do not act properly if the will is not strongly fixed upon their action.

Natrum Carbonicum.—Intolerable melancholy; wholly engrossed by his sad thoughts; inability to concentrate his mind or perform any mental labor. Memory poor; aversion to society; sleepless or disturbed sleep; greatly depressed after meals; better when food has passed out of stomach into the intestines; aggravated by vegetable diet and all starchy food; worse during thunderstorms, while hearing music, from the heat of the sun, and during the full moon.

Especially indicated where the mental disease has been caused by overheating, by the sun's rays, or from overstudy, and when accompanied by its characteristic form of indigestion.

While *natrum carbonicum* is not so frequently demanded as some other drugs, it should not be forgotten when the patient presents its peculiar combination of symptoms.

Oleander.—Weakness of memory; slowness of perception; difficulty of comprehending what is said to him; utter indolence and aversion to all work; refuses to dress or eat; greatly enraged by any interference; marked sensorial depressions, vertigo; restless sleep; voluptuous dreams with seminal emissions; obstinate constipation; brown, burning urine, with whitish sediment; stiffness and coldness of limbs with trembling and loss of muscular power; oppressed breathing; tendency toward paralysis.

Opium.—Dull, stupid, with little mental comprehension; obstinate; face flushed; red, bloated, swollen, with muscles relaxed; producing a drunken expression, devoid of all intellectuality; obstinate constipation; stools black, hard, round like sheep-dung and expelled with difficulty; heavy, unrefreshing sleep.

The action of this drug is often slow, but the cures which it has effected upon apparently hopeless cases seem veritably miraculous.

Veratrum Album.—Marked cerebral innervation, with inability to control his movements; obstinate taciturnity; mind dull and stupid; face pale and sunken; nose blue; coldness of body and limbs with perspiration on the forehead and lowered general vitality.

Veratrum album has proven, in our experience, the most valuable remedy in our pharmacopæia in combating this formidable disease. Many of these patients, who for weeks had passed their days sitting with heads bent and hands resting upon their knees, noticing nothing, with their mental and physical vitality reduced to the lowest ebb, we have seen, under the influence of this drug, revived, renewed and restored to their normal activity of mind and body. If Hahnemann had never given to the profession anything but *veratrum album*, he would still have laid us under an everlasting debt of gratitude for placing in our hands a means of restoring to life and usefulness a class of unfortunates apparently hopelessly condemned to a fate worse than death.—*N. A. Journal of Hom.*

F. MORTIMER LAWRENCE, M.D.

THE HAHNEMANNIAN MONTHLY.

JUNE, 1897.

SCIRRHOUS POLYPUS OF THE DESCENDING COLON.

BY A. K. CRAWFORD, M.D., CHICAGO, ILL.

THIS somewhat unusual case was in charge of Dr. N. A. Pennoyer and his able assistant, Dr. Dell, at the Pennoyer Sanitarium, Kenosha, Wis. As soon as the conditions assumed a serious aspect I was called in consultation, and later we wired for Dr. Chislett. The report is submitted to the profession not because of any success claimed as a result of its treatment, but rather because of its several unique features.

Presumably a medical case in its inception, rapidly proving itself to be beyond medical aid, the resort to an operative procedure, followed shortly by death from exhaustion, with the ultimate findings of a cancerous condition in the post-mortem and microscopical examinations, invest the history of only five days' illness and suffering with peculiar interest.

Mr. P.; age, 73 years; American. He had been a hale and hearty man, of bright intellect and rather spare habit of body. He had lived a wholesome, hygienic, and industrious life. Of late years his chief occupation had been gardening, a self-imposed task. One year ago this patient noticed a sense of fullness in the abdomen and was unable to evacuate the

bowels. He had suffered from similar spells for years, but during the eight or ten months prior to the present illness the bowels had been in unusually good condition, and his general health unimpaired. He had occasionally referred to a vague, ill-defined pain in the lower left side of the abdomen. Once he had an attack of intestinal colic, lasting several hours.

On July 24 he complained of feeling ill, the discomfort being chiefly in the abdomen. This was referable to the fact that for several days he had been unable to get an action of the bowels. Purgatives in the shape of one-half grain podophyllin pills and the aloin, belladonna and strychnia tablets proved unavailing.

In the afternoon he took to his bed, and that evening an attempt was made to flush the colon. The discomfort in the bowels increased gradually during the night, so that by early morning the pain was diffused throughout the whole abdomen. Hot fomentations were applied, which, with the remedies, afforded some relief. On the morning of the 25th there was some tympanitis and slight general tenderness. The pulse was 88 and the temperature 99° . Colon flushings with inspissated ox-gall dissolved in the water were given four or five times during the day, and the hot fomentations were continued. There was some thirst, but only small quantities of liquid could be retained.

When I saw the patient, in counsel that afternoon, he presented the following condition: A fairly nourished body, a good complexion, and an expression calm, though indicative of suffering. The temperature was $99\frac{1}{2}^{\circ}$, and the pulse about 90 per minute and of fair volume. There was, of course, some prostration. This seemed natural enough, considering the suffering in the abdomen, the frequent enemata, the hiccough, which had replaced active vomiting, the loss of sleep, and the deprivation of food. The only wonder was that his vitality had not been more sapped. Abdominal distention was well marked. Superficial percussion revealed a decided tympanitic resonance that was general. Upon deep percussion a well-defined area of comparative dulness could be outlined along the course of the descending colon, about midway between the splenic and sigmoid flexures.

In the hope that the case might still prove to be one of in-

testinal impaction, my advice was in the line of a continuance of the same methods which had been adopted.

Argentum nit. in a low dilution was recommended internally, and a dose of castor oil, $\mathfrak{z}\text{ij}$, was given and retained. Four hours later this was followed by olive oil, $\mathfrak{z}\text{iv}$, and repeated each four hours until a pint had been taken. As there was some amelioration of the stomachic irritability, liquid nourishment was tried, only to be rejected. But the oil was retained and the hiccoughing had ceased.

This quietude and ability to retain so much oil may have been due in part to the hypodermic injection of one-eighth grain of morphine, which was administered in the night for the relief of the pain. But the tympanitis and sensitiveness of the abdomen grew apace, and nothing more than fecal coloration of the water used in the colon flushings was obtained. The pulse raised to 92 per minute, the temperature remaining at 99° . The one-eighth grain doses of morphine were repeated about every four hours.

On the 27th faradization was applied for twenty minutes by means of a metal electrode in the rectum and the sponge over the original seat of pain in the abdomen, and repeated again the same evening.

Early on the morning of the 28th a second dose of castor oil, $\mathfrak{z}\text{ij}$, was given. All the symptoms grew more and more pronounced through the day. Vomiting had returned and became more frequent, and small quantities of oil were now ejected emulsified, accompanied with a dark, muddy fluid. The hypodermics of morphia were increased to one-quarter grain doses. The patient's strength was rapidly waning. Pulse, 96; temperature, $99\frac{3}{5}^{\circ}$.

When Dr. H. R. Chislett arrived upon the scene, at midnight, he found that the abdominal distention had become extreme. The pain, heretofore paroxysmal, was now continuous, and the vomiting incessant. The pulse was weak, thready and rapid. The temperature had risen to 102.2° , and the facial expression had assumed a drawn, anxious look. It was decided to operate at once.

Although it was after midnight and the whole family awake and alive to the very critical juncture which the case had reached, the technique of a modern surgeon's demands were

in nowise slighted. Everything was done in the way of preparation of the instruments, the attendants, the surgeon and the patient in the most approved aseptic manner, without flurry or the omission of a single detail. The operation itself can best be described in Dr. Chislett's own words:

"The abdomen was carefully shaved, scrubbed and sterilized with a solution of bichloride of mercury 1-1000, then with alcohol, and a moist dressing of bichloride applied. The patient was then anæsthetized and conveyed to the operating-room warmly wrapped in sterilized blankets and sheets, the field of operation exposed and surrounded by an additional number of sterilized towels. The abdomen was once more washed with alcohol and the peritoneal cavity entered by a median incision two inches long midway between the pubes and the umbilicus. A greatly distended coil of the small intestine, dark-purple in color, popped into the opening. Hasty inspection revealed the whole viscera to be in the same condition, and deeming a short operation the only chance, we determined not to look for the original cause, but to relieve the greatest danger now present, the extreme distention, by enterotomy. An inch of the distended ilium was therefore drawn into the wound and four sutures (one at each side and one on each end) passed through the fascia, the parietal peritonæum, and the muscular and serous coats of the intestines. This was firmly fixed by additional interrupted sutures uniting the parietal and visceral peritonæum so as to completely shut off the peritoneal cavity. The rest of the incision was carefully sutured and a longitudinal incision from $\frac{1}{2}$ to $\frac{3}{4}$ of an inch in length made into the intestinal loop. There was an immediate gush of gas and fluid. The finger was introduced to insure an unobstructed passage, a moist dressing applied and the patient sent to bed with a better pulse, a far less distended abdomen and a much more healthy color. He seemed to rally at first, but soon began to fail, and died of exhaustion about eleven hours after the operation.

"The post-mortem showed that adhesions had already taken place between the sutured peritoneal surface. The fistula was in the ilium, about one foot from the caecal valve, and had served its purpose in allowing the escape of the intestinal contents. In the descending colon, the area where the dulness had been outlined, was found an annular carcinoma so com-

pletely closing the lumen that the contents, softened as they were by the oils, could not pass in any quantity. No more could the injections be forced through from below. Even after death it was with difficulty that the middle finger could be forced into the opening."

The specimen was submitted to Dr. A. C. Halphide for microscopic examination, whose report is herewith submitted :

"I have made a careful examination of the specimen you sent me in the case of Mr. P., and find it to be what is commonly known as a malignant polypus of the rectum, from its frequent occurrence in that location. It is an adenoma, and the character and arrangement of the cells require its classification among the epitheliomata, *i.e.*, it is a columnar-cell epithelioma (cancer). They are not very rare nor very malignant, and are of rather slow growth, accompanied by little inflammation. The chief danger is usually, as in this case, from mechanical irritation, pressure or obstruction of the canal.

"The canal in this case was practically occluded, the opening being only three-eighths of an inch. I have made a couple of drawings—one actual size (Fig. 1), the other (Fig. 2) magnified about one hundred diameters."

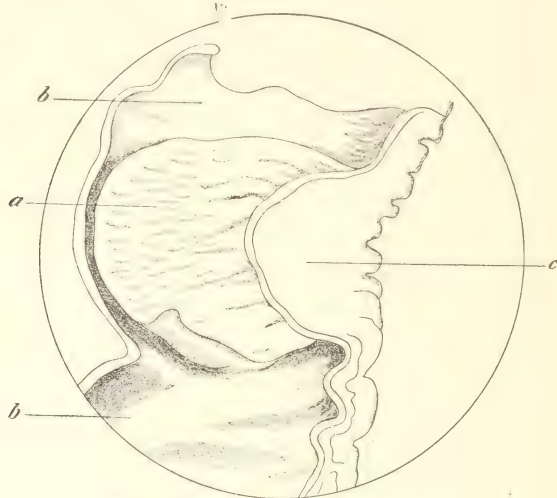
In the usual course of cases of intestinal obstruction due to cancer, we look for disorders extending over weeks or months.

Constipation may be looked for far back in the history, a constipation which does not respond to ordinary doses of cathartics, and which presents the peculiarity of a ribbon-like or of a sheep's-dung stool. Parallel with the development of these symptoms of bowel trouble a tumor may be discovered when the abdomen is explored, which, with the well-known cachexia of cancer, embracing emaciation, anæmia, pain, and bloody and mucous discharges fills in the details of the picture. Then when the obstructive symptoms appear they are marked with less violence than when the occlusion is due to an intussusception, a volvulus or fecal impaction.

The history and symptoms with which we were confronted in the present case were those of previously good health, constipation of three days' standing, sudden onset of pain and tenderness in the left iliac region, at first intermittent, afterwards continuous, distressing and almost incessant vomiting, and with

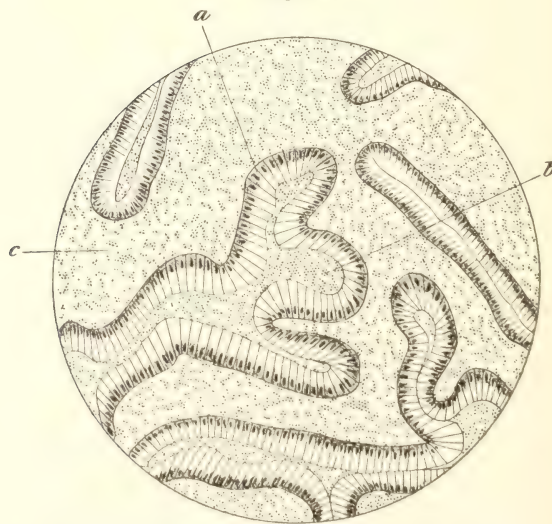
the advancement of the symptoms general abdominal tenderness and tympany.

FIG. 1.



- a.* Spongy growth (adenoma).
- b.* Intestine not involved.
- c.* Seat of tumor, fatty connective tissue.

Fig. 2.



- a.* Columnar epithelial cells.
- b.* Alveolus.
- c.* Stroma, new connective tissue.

The modified percussion-note observed in the line of the de

scending colon was taken to mean impacted feces, and such it proved to be on the post-mortem table, only that the mass by that time had become softened by the action of the oils and remedies administered. The tumor which had caused the stasis of the dejecta at that point would have been scarcely detectable under the most favorable circumstances because of its small size. It simply filled the lumen of the tube and by palpation through an attenuated abdominal wall could not have been differentiated from a scybala. Still less chance was there to determine the presence of this growth, seeing that there was no reason to suspect bowel trouble until the symptoms of acute obstruction set in, when the growth was already banked up by fecal matter.

Under the light which the post-mortem has shed upon the case, I believe that the only time at which a surgical operation could have given promise of even a moderate chance of success was before the disease pronounced itself.

But at the moment, the case being much obscured, the operation was called for as a last resort. According to the history and symptoms of the case it was a medical one, but as it baffled every medical means at our disposal, the surgeon was the logical successor.

One of the mysteries of the case has been explained by the microscopical examination. Why, being a cancer, did we not obtain some evidence of its nature through the development of cachexia and other well-known features? Because microscopically it is a cancer, but constitutionally it is not. It is the form of growth that Bristowe describes as a "scirrhus polypus," met occasionally in the bowels, its chief or perhaps only seats being in the sigmoid flexure and rectum. He says: "It produces results resembling in almost every particular those described as belonging to true scirrhus. It seems, however, to differ from that in its *purely local character*, in the absence of all secondary deposits, as well as in its elementary constitution."

SOME INDICATIONS IN CHILDREN.—The *cina* baby bores its finger into its nose; the *arum triphyllum* child picks at its lip. In *squilla* there is an indication in rubbing the fist across the face, while *gambogia* suits cases where the eyelids are rubbed.—*Chirmanian*.

CAN THE LAW OF SIMILARS BE PROVEN EXPERIMENTALLY?

BY M. W. VAN DENBERG, A.M., M.D., FORT EDWARD, N. Y.

PART IV.

ALLOPATHIC WRITERS AND AUTHORS WHO SAW THE LIGHT OF TRUTH
BUT FAILED TO WALK IN THE LIGHT.

H. C. WOOD, M.D.

THE voice of one crying in the wilderness was scarcely more significant than are the words of H. C. Wood in his preface to the first edition of his *Therapeutics*. It is not dated, but doubtless reaches back to 1875. He says: "The old and tried method in therapeutics is that of empiricism, or, if that term sounds harsh, of clinical experience. As stated by one of its most ardent supporters, the best possible development of this plan of investigation is to be found in a close and careful analysis of cases before and after the administration of a remedy, and, if the results be favorable, the continued use of the drug in similar cases. It is evident this is not a new path, but a highway already worn with eager but weary feet of the profession for two thousand years.

"Therapeutics developed in this manner cannot, however, rest upon a secure foundation. What to-day is believed, is to-morrow to be cast aside; certainly this has been the law of advancement, and seemingly must continue to be so. What has clinical therapeutics established permanently? Scarcely anything beyond primary facts that quinia will arrest an intermittent, that salts will purge, and that opium will quiet pain and lull to sleep.

"*To established therapeutic facts* the profession clings as the heart and hand of one man; clings with a desperation and unanimity whose intensity is the measure of the unsatisfied desire for something fixed. Yet with what a babel of voices does it celebrate its two thousand years of experience.

"Experience is said to be the mother of wisdom. Verily she has been in medicine rather a blind leader of the blind, and

the history of medical progress is a history of men groping in the darkness, finding seeming gems of truth one after another, only in a few minutes to cast each back to the vast heap of forgotten baubles, that in their day had also been mistaken for verities. In the past there is scarcely a conceivable absurdity that men have not tested by experience, and for a time found to be the thing desired; in the present, homœopathy and other similar delusions are eagerly embraced and honestly believed in by men who rest their faith upon experience. Since the profession has toiled so long and found so little, if further progress is to be made we must question the old methods and search out new ones, which may lead to more fruitful fields. It is the especial province of the therapist to find out what are the means at command, what the individual drugs do when put into the human system. It is seemingly self-evident that the physiological action of a remedy can never be made out from a study of its use in disease. Under all circumstances the problem is one of the most complex with which the human mind has to grapple, and to introduce into this problem the new and ever-varying factors of the effect of disease and its natural vibrations on the system, is to put the matter beyond human prescience. In spite, then, of Dr. Niemeyer's assertion that experiments made with medicants upon the lower animals or upon healthy human beings have as yet been of no direct service in treating disease, and that the continuation of such experiments gives no prospect of such service, it is certain that these experiments are the only rational scientific groundwork for the treatment of disease. *We must discover what influence a drug exerts when put into the body of a patient before we can use it rationally, and we gain this coveted knowledge only by the method indicated.*" (Preface to the first edition, pp. 7-9.)

But it is not possible, perhaps, for fallible man to always be consistent with himself. In his moments of sincere insight, when he frees himself from the overpowering influences of habits, associations and prejudices, he may utter the naked, undisguised truth *as his soul sees it*.

But later on he is apt to evade, qualify and mollify to suit those prejudices, habits and associations, from whose power he cannot wholly free himself.

Such reasons as these alone can explain the peculiar course

of H. C. Wood in his subsequent pages. Hahnemann himself never more forcibly pointed out the fallacy and futility of pursuing medical knowledge on the old lines, nor more clearly indicated "the only *scientific method*" of gaining insight into the action of drugs.

"It is seemingly self-evident that the physiological action of a remedy can never be made out from its use in disease." "It is certain that in the experiments made with medicaments upon the lower animals or upon healthy human beings lies *the only rational scientific groundwork for the treatment of disease.*" The only logical method of procedure after these admissions was to establish the relationship, if any, existing between curative medicaments in their action in disease and in their action upon the lower animals or upon healthy human beings.

This comparison would be at first purely clinical, purely empirical.

Having determined what drugs or drug was curative in a diseased state, the phenomena of this disease would be compared with the drug-phenomena upon the healthy. This would, in Wood's own words, "furnish the only rational scientific groundwork for the treatment of disease."

It seems almost inconceivable how a sane man holding these views so clearly could have escaped discovering *a* therapeutic law. The only possible explanation for it lies in the probability that he would not follow out his own sound advice.

And such has been the case.

Reared in a school founded on traditions old as known history, holding a worthy place among the leaders in that school in his own times, all the power of habit, associations and prejudices combined to keep Wood where he was and above the suspicion of *heresy*.

But a new era had been ushered in with the advent of homœopathy. The custom of administering immense physiological doses of drugs, so common half a century before, had become extinct. With the advent of smaller doses came the confirmations of Hahnemann's law of cure, though its force was strenuously denied.

These confirmations were destined to fill the pages of allopathic materia medica, but they were not to be sought in a straightforward manner, but by the roundabout method of empiricism.

Wood's animus in this matter is best shown by a quotation only a few pages beyond the above-mentioned announcement of the homœopathic method of determining the relations of drugs to disease. He says :

"The term *indication* for a given remedy being in constant use, ought to be distinctly understood ; by it is meant the pointings of nature, or, in other words, the evident needs of the system. The suppression of a secretion from over-excitation is an indication for some drug that will allay irritation ; while the same suppression, when dependent upon torpor, or the loss of cell activity, will call for an excitant, an irritant. The childish absurdity of treating symptoms by any such law as 'similia similibus curantur,' or 'dissimilia dissimilibus curantur,' is at once apparent.

"The same symptoms may be the result of absolutely antagonistic conditions, and require absolutely opposite treatment. One example will suffice. Either irritation or depression of the stomach may cause vomiting. Therefore, in the one case, a stomachic stimulant, such as ipecacuanha, which, when given freely in health will produce vomiting, may relieve the vomiting, because the depressed stomach needs a stimulation to bring it up to the normal level.

"In another case, a stomach which rejects food because it is irritated needs a sedative like bismuth, which, in health, will not produce vomiting.

"In the first case the law of similars seems to hold good ; in the second, the law of dissimilars.

"A law of nature has no exception. If an alleged law of nature has exceptions, it is not a law. It is plain, therefore, that neither of the alleged therapeutic laws of similars or of dissimilars is indeed a law. They are the results of coincidences, the expression of half truths. The conscientious physician refuses to practice upon homœopathic, allopathic or any other restricted basis, but gleans therapeutic knowledge from all sources, guiding himself by the light of reason and science, but hesitating not to go beyond into the region of the unknown and uncertain when distinctly led by the lantern of empiricism." (*Ib.*, pp. 101, 102.)

Had Wood applied the knowledge at hand in his own book, according to the principles he laid down only a few pages be-

fore, he certainly would never have made such statements regarding ipecacuanha and bismuth.

In the first place, if ipecacuanha cures vomiting in a "depressed stomach" because of its "stimulant nature," the cure is not by similars, as he states, but by dissimilars.

But we will take Wood's own word for the nature of the action of ipecacuanha. Of course, it is classed under "emetics."

He has spoken of ipecacuanha in the example quoted as "a stomachic stimulant." On page 682 and following he says: "When exhibited in small repeated doses to man it produces malaise and nausea; even when the dose is large the vomiting is not apt to be severe nor the prostration marked, no doubt because the excess of the drug is rejected before absorption."

Certainly a remedy that "in small doses produces malaise and nausea," and in large doses only escapes "marked prostration" because it is too quickly rejected, cannot by any stretch of imagination be classed as a "*stimulant*."

Hence, if ipecacuanha cures vomiting in a "depressed stomach" it must be by virtue of its *non-stimulant* action,—by similars.

Bismuth, we are told, "is a sedative, and never produces vomiting in the healthy," therefore it is useful in vomiting from an "irritated stomach." If, now, we turn to Wood's description of bismuth, we may read this: "The soluble preparations of bismuth are *active irritant poisons*, but the insoluble subcarbonate and subnitrate, when pure, have practically no irritant influence." (*Ib.*, p. 468.)

Having granted that "the soluble preparations are active irritant poisons," he asserts that "the subcarbonate and subnitrate are practically non-irritant," and then says: "When the subnitrate of bismuth is administered, the metal can always be detected, after a few hours, in the urine."

So, then, this "active irritant poison" is absorbed in very minute amounts in every case where it is administered.

What is the effect of the soluble preparations? "In acutely poisoned mammals, vomiting, purging, convulsions with loss of power, slowing of the pulse, and sinking of the blood-pressure." (*Ib.*, p. 470.)

This is from the administration of the citrate of bismuth. But Wood also states, "the most insoluble preparations of bismuth are actively antiseptic. This has led to their use in sur-

gery, but when applied in large quantities to extensive wounded surfaces they are capable of so much absorption as to produce a poisoning characterized by acute stomatitis, followed by intestinal catarrh, with diarrhœa and pain, and in severe cases by desquamative nephritis." "In the lower animals, whether given by the mouth or hypodermically, it (the subnitrate) causes a peculiar stomatitis, gastro-intestinal irritation, gradual failure of strength, and death by exhaustion." (*Ib.*, p. 469.)

From the foregoing it is not difficult to conclude whether bismuth acts homœopathically or not in the following instances, in which it is recommended by Wood:

"It is useful to allay vomiting dependent upon gastric irritation."

"In feeble, badly-nourished subjects it is often of great service."

"In gastric and enteric catarrhs, it is a standard remedy."

"In pyrosis it is sometimes successful."

"In simple diarrhœa of irritation and in chronic diarrhœa of cramps it is often very efficient."

"In chronic bowel complaints of children in the summer season, when combined with pepsin it is almost invaluable."

"It is useful as a topical application in inflammations of mucous membranes."

Certainly the only thing Hahnemann himself could have added to this list would have been to have recommended it in "desquamative nephritis with tube-casts and albuminous urine."

What story of wilful blindness can equal this? The administration of bismuth in irritated states of the digestive tract is a cure by dissimilars!

Nor is this the only example. Not a drug treated by Wood from the beginning to the end of his work, in which he has given any adequate account of the physiological action, and wherein he has furnished two or more applications of the drug in disease, but will afford a confirmation of the law of similars.

Why is this so? Because "regular medicine" has been compelled to employ small doses; that is, non-toxic doses. These, to be curative, must follow nature's law of cure.

Empiricism has found some instances where drugs are useful, in small doses, and to these "established therapeutic facts the profession clings as with the heart and the hand of one man;

clings with a desperation and unanimity whose intensity is the measure of the unsatisfied desire for something fixed" (p. 8), and in every case these "established facts" confirm the law of similars.

Experimental demonstration of this law is found in the practice of every allopathic physician in the land who follows Wood's recommendations.

How much they miss, that an appreciation of a scientific view of the facts would disclose, can only be appreciated by those whose eyes have been opened to see things as they really are.

Wood and Stille have each, independently, laid down "the only scientific method of procedure," and in this they perfectly agree. They have asserted with unanimity in the clearest and most unmistakable terms the value of such a method. But forsooth, because Hahnemann had explored and fixed the boundaries of this new route fifty years before their time, the prejudices of "the regular profession," its pride and its self-love, so mastered their common sense and common honesty that neither had the moral courage to face the obloquy that would have inevitably followed the application of the method which both had unreservedly endorsed. *Sic passim.*

DISLOCATION FORWARD OF THE HEAD OF THE ULNA AT THE WRIST-JOINT—FRACTURE OF THE STYLOID PROCESS OF THE ULNA.

BY G. A. VAN LENNEP, M.D., PHILADELPHIA.

(Read before the Homœopathic Society of the County of Philadelphia, March 11, 1897.)

DISLOCATION of the head of the ulna at the wrist is looked upon by the majority of authorities on the subject as extremely rare. Hamilton, in his work on *Fractures and Dislocations*, says that this accident "without a fracture of the radius is quite rare." Dupuytren saw two cases, and Sir Astley Cooper none that were recorded.

A subluxation of this bone is often found complicating Colles' fracture of the radius, and we are taught to treat such fractures with the hand turned to the ulnar side to overcome the prominence of the ulnar styloid process. Complete dislo-

cation of the head of the ulna can occur in two directions: the backward variety, in which the head of the bone is displaced to the dorsal surface of the wrist, and the forward, in which we have the head protruding into the palm.

Of these two, the backward or dorsal variety is the more common, and is produced usually by extreme pronation, sometimes by direct violence. The synovial membrane or saciform ligament is ruptured, as well as the internal lateral ligament, and the triangular fibro-cartilage. The head of the bone leaves its socket in the side of the radius, and is displaced backward, or backward and outward, or at times backward and inward, so as to overlap the radius, and can be felt protruding in its new position. If we look for the styloid process of the ulna we find it to be no longer in a line with the metacarpal bone of the little finger.

Reduction is accomplished by pressure on the ulnar head, assisted by forcible supination of the hand. Recurrence of the deformity after pressure is removed occurs in some cases, and is difficult to overcome.

The forward or palmar dislocation is even more rare than the former variety, and is the result generally of violent supination of the hand, or it may also be due to direct violence. The rounded head leaves its articular surface and appears as a projection into the palmar surface of the wrist, the normal prominence of the styloid process on the back of the wrist is gone, and in its place is found a depression into which the tip of the finger can be laid; the breadth of the wrist, moreover, is lessened so that it appears narrower than its fellow.

Reduction is made by pushing the ulna towards its proper position, at the same time flexing the hand, or if this fails then by extension or forced supination with manipulation.

Stimson reports the case of a woman, who had her hand and wrist caught between a dumb-waiter and the edge of its inclosure. The hand, after the accident, was completely supinated and could not be pronated, the normal prominence of the ulna styloid was missing, and in its place was a depression. The head of the ulna was found protruding into the flexor surface of the wrist, while the relations of the radius to the carpus were unchanged. Reduction was easily accomplished by pushing the head of the ulna backward, combined with forced pro-

nation. The dislocation, however, could be easily reproduced by pressing the ulna forward and supinating the wrist. There was a distinct snap when the bone went into place. (*New York Medical Journal*, 1889, vol. xlix.)

Hamilton cites the case of a girl, who had, two years previously, sustained a dislocation at the inferior radio-ulnar joint. When examined by him the head of the ulna became displaced backward in the act of supination, and forward in the act of pronation. (*Fractures and Dislocations*, 1891, page 661.)

The styloid process of the ulna is occasionally broken as a complication of Colles' fracture of the radius. Very rarely the process is broken alone, by direct violence. I have been unable to find any recorded cases of this injury in the medical literature for the past ten years. Hamilton in his work on *Fractures and Dislocations* (page 321) touches on this subject only to speak of its diagnosis and treatment. The injury would be recognized by obtaining abnormal mobility, and perhaps crepitus, the process being grasped between the thumb and forefinger, together with the history of direct violence. It is best treated with the wrist fixed in a position slightly inclined towards the ulnar side. Union is usually fibrous.

The following case is a good example of the combination of these two rare injuries, it being the only case on record, so far as I can ascertain. It also serves to demonstrate to the medical profession the value of the Roentgen rays.

F. G., a large, muscular man; 44 years of age; applied to the receiving ward of the Hahnemann Hospital, January 6, 1897, for treatment, with the following history:

Some two hours before a heavy freight case fell a distance of a foot or more, striking him on the radial side of the right forearm and wrist, the ulnar side of his hand and forearm at the time resting on the edge of another box. The force of the blow was crushing in character, and supinated the hand violently. When first seen pain was excessive; the hand was fixed in a position between pronation and supination, with the fingers flexed. The swelling was very great, so that it was impossible to make out the position of the bones at the wrist. A splint and compression bandage were accordingly applied, and he was referred to the out-patient orthopedic department. Two days later, when swelling had subsided, the character-



FIG. I.—Skiagraph showing fracture and dislocation.



FIG. 11.—Lateral view showing forward displacement of ulna.

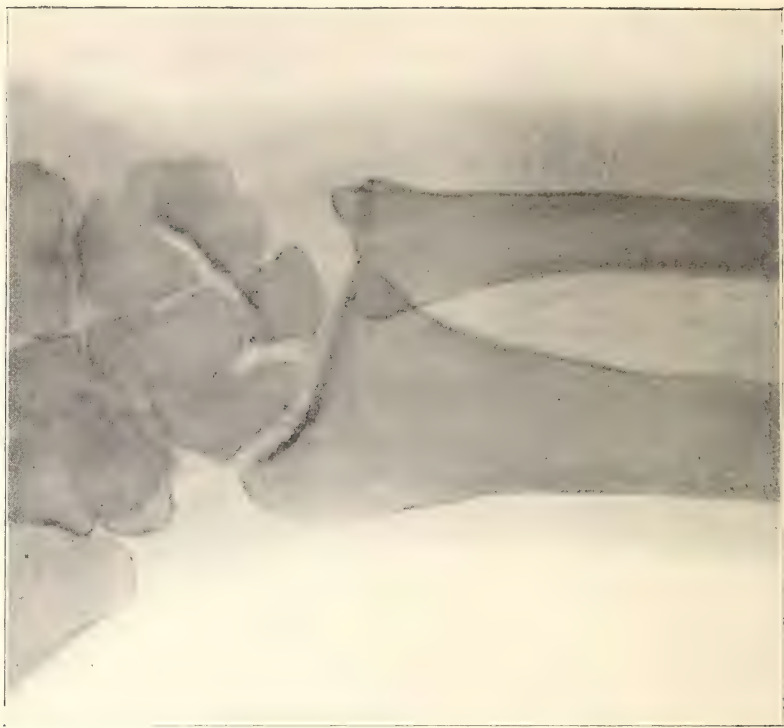


FIG. 111.—Showing reduction of fracture, and partial reduction of dislocation.

istic appearance of a forward dislocation of the ulna was made out, and while attempting reduction bony crepitus was felt. It was thought best under the circumstances to try the X-rays before proceeding further, and a very interesting condition was found. The skiagraph was taken with the hand and arm pronated, and showed that the head of the ulna overlapped the lower outer border of the radius (Fig. I.) Beyond the end of the ulna and distinct from it was a small piece of bone, the "chipped off" styloid process. A side view demonstrated the ulnar head projecting markedly forward. (Fig. II.)

Reduction was accomplished by pushing the ulna back toward its socket and supinating the hand. The deformity, however, recurred as soon as pressure was removed. The best dressing was found to be an anterior right-angled, moulded plaster-of-paris splint, which kept the forearm supinated, and the hand turned slightly to the ulnar side. (Fig. III.)

In this position the head of the ulna was found to be held fairly well in place, the broken surfaces best approximated, and the patient obtained the greatest degree of comfort.

The dislocation, however, persistently recurred after each attempt at reduction, and one is inclined to believe, in view of the severe nature of the accident, and the enormous swelling of the parts, that the shallow "cup-joint" on the radius was injured to such an extent as to be unable to hold the head of the ulna in place.

At the end of four and a half weeks all dressings were removed and the patient was instructed to use his hand as much as possible, at the same time having passive motion performed daily. Pronation and supination were, however, destroyed. The hand was fixed in a position of moderate supination and practically useless. Two weeks later, there being no improvement, the patient was etherized and an attempt made to break up adhesions. This failed.

On March 8, two months after the accident, the lower end of the ulna was cut down upon, the incision being made on its outer aspect. It was found impossible to replace the head, and therefore this was excised. The styloid process was found united to the shaft by fibrous tissue. There was also a longitudinal fracture or splitting of the head of the ulna. This the Roentgen rays failed to bring out. The two bones were firmly

bound together by fibrous tissue, which also filled the joint-surface of the radius and prevented any motion. After excising the head the normal functions of the hand were restored.

The wound healed throughout by first intention, with the exception of a small space at the lower angle, where a capillary drain was inserted. The ultimate result is good; pronation and supination are greatly improved, the constant pain has disappeared, and there is but slight impairment in the strength of the wrist and the hand.

HOSPITAL CONSTRUCTION AND THE CARE AND CURE OF THE ACUTE INSANE.

BY SELDEN H. TALCOTT, A.M., M.D., PH.D., MIDDLETOWN, N. Y.

(Read before the New York State Homœopathic Medical Society, February, 1897.)

THE treatment of insane people requires, first of all, buildings which are especially adapted to the necessities of this class of invalids. It also involves the selection of suitable sites whereon to construct these necessary buildings. The care of the insane involves a consideration of climatic influences and atmospheric states.

In the treatment of the acute insane there are required the same measures which are applied to the restoration of those suffering with any form of acute physical disease. Such measures include dietetics, trained nursing, sanitary surroundings, moral hygiene, sunlight, fresh air, suitable beds, and the application of mild, modern therapeutics.

The sanitary requirements are the same as those which are found in any first-class general hospital. Especial care should be given to the matters of drainage and sewerage.

Selection of Site for Buildings.—The selection of a site for buildings which are to be occupied by the acute insane should be made after considering climatic and scenic, as well as sanitary, conditions. An elevated plateau should be selected, if possible. This should overlook the seashore, if the institution is to give shelter to cases of acute mania; or it should overlook majestic mountain peaks or stately hills, if the hospital is

intended for the care of cases suffering with acute melancholia. It is said that sea air has a soporific influence upon patients suffering with mania, while the air and scenery of the mountains are most inspiring and beneficial to the victims of melancholia.

Sites suitable for good sanitation must be attained, but to these may properly be added the inspirations of grand or beautiful or stirring scenery of either the summits or the surf. Patients who are convalescing from insanity are stimulated and helped to recovery by the beauty or grandeur of the environments which nature throws about them.

The soil of the site selected should be dry and porous; or, if it is a stiff clay, it should at least be amenable to the influences of good drainage and cultivation. An elevated site should always be selected, in order to insure the speedy and sure disposal of sewage and surplus water.

As far as practicable, the sites of buildings for the care of the acute insane should be located in the most temperate parts of the State, so far as climate is concerned. It would be unwise to place buildings for the sick and sensitive upon the tops of mountains, where bleak weather often prevails. It would be better to select a site upon the southern slopes of the mountains, where there is protection from the severest winds and the wildest weather.

Buildings designed for the care of the insane should be located due north and south, or a little east of south, in order to secure as much sunshine as possible upon the east, south, and west sides of the buildings.

The State of New York has a considerable variety of climate from the south shores of Long Island, which are swept by the mellow influences of the Gulf stream, to the heights of the Adirondacks, which are inspiring and health-promoting in their clear atmospheres and salubrious waters. The southeastern slope of the Adirondacks would constitute a suitable site for another State hospital building. This, if located north of Saratoga, would accommodate the northern and eastern portions of the State.

There is so much fine scenery in the State of New York that there is no excuse for locating a State hospital for the insane in some flat, uninviting, uninspiring portion of the Com-

monwealth: nor is it necessary to select sites in the coldest portions of the State. It would be better to group these buildings in those localities where the climate is most mild and most favorable to recovery, and then transport patients to such buildings and such places, instead of sending them to those regions where the climate is of an almost Siberian severity.

The southern and eastern portions of Long Island might very properly be used for the care of the acute insane, and also the southern and eastern borders of the Adirondacks might be available. Possibly the State of New York might, through a process of reciprocity, establish a colony for the insane in the State of Florida, where there is now but one lunatic to eleven hundred of the people. The climate of Florida is soft, enervating, restful, relaxing, and tends not only to the prevention of insanity, but to the relief of those who are already afflicted with mental or nervous invalidism. Some of the denizens of Florida might be stimulated and improved by a temporary sojourn in the cool, invigorating air of the north.

Buildings.—The buildings for the acute insane should be one or two stories in height. Each building should be designed for the accommodation of a small number of patients, say from twenty-five to fifty. If the cases are mild and not inclined to disturb each other, then the buildings might be made to accommodate one hundred or one hundred and fifty each. But the disturbed cases should be treated in as small buildings as practicable, and distributed in such a way as to produce the minimum of disturbance on each other.

A series of buildings may be connected by corridors for convenience of management and care. Patients may thus go from one building to another without exposure, and the officers and employees are also, by means of corridors, protected in the discharge of their duty.

The buildings should be of brick, with hollow walls, and sufficiently strong for all practical purposes. The floors should be of paneled oak or body maple, and the ceilings should be of steel, fashioned into bright and attractive patterns. The side walls should be of adamant cement, and every corner should be made a quarter round.

Each building should have a basement not less than nine feet in height, and it should come well out of the ground; this

to be done in order that it may at all times be supplied with fresh air and as much sunlight as possible. The floor of the basement should be of cement or stone. The cement floor should be laid in a sloping fashion, so that the basement may be cleansed by hosing water over the floors and into the drain-pipes. Nothing should be allowed in the basement except water-pipes and drain-pipes and steam-pipes for heating purposes.

The hospital building should be divided into large rooms, each containing twenty or thirty beds; and a few single rooms should be attached thereto. The hospital wards should be spacious and airy, with high ceilings and large windows. The open wards may contain most of the patients, while the single rooms can be used for the disturbed or sensitive.

Each ward should have easy access to a tower containing baths, water-closets, urinals, slop-sinks and lavatories.

Each hospital ward should have a dining-room and a large butler's pantry, where the food can be prepared and served. Those who are convalescent and quiet may eat in the dining-room, while those who are feeble and sick should receive food in their beds, after the custom of the Frenchman who takes his coffee and roll in the morning without rising.

If it is desirable to isolate some very disturbed cases, they may be placed in one-story hospital buildings detached from the main structures. These buildings should be thoroughly lighted, and if necessary, skylights, as well as side lights, may be used. But there are very few disturbed cases who do not become quiet more quickly if associated with others than if kept in absolute seclusion. The seclusion of the noisy and the violent should only be a temporary matter. We think at least sixty-five per cent. of the acute insane may be treated in large hospital wards in association with each other, and where trained nurses may have their eyes upon all the patients all the time, both day and night. By such means the patients get constant nursing, and the method is economical, as a nurse can take better care of half a dozen cases when they are in one room than he can of three patients if they are isolated in single rooms.

We have been asked if patients did not disturb each other when associated together in a large hospital infirmary. Our experience is that the patients do not, as a rule, disturb each

other under such circumstances. Each insane person is so wrapped up with his own thoughts, and so abstracted from his surroundings by his own schemes and imaginings, that he is but little affected by the actions or sayings of those around him. The insane do not have the power of combination which belongs to those who are sane. If they did retain this power of combined and associated action, then it would be impossible to keep them very long in any hospital or ward. They would plot against their nurses and escape. But, fortunately or unfortunately, the insane lose, to a large extent, the power of concerted and cohesive action.

When patients begin to convalesce, then they sometimes desire to seek the seclusion which is afforded by the single room. When they have secured all the benefits of treatment in a general hospital ward, then they should be granted the privilege of a single room, or a room in which two or three patients may be associated.

If the hospital buildings are two stories in height, then the floors should be thoroughly deadened, in order to prevent the patients on the first floor from being disturbed by those who may be shouting or dancing above them.

Ventilation and Heating.—There are several methods of enforcing ventilation in a hospital ward, but the sum and substance of them all is embodied in the one word “draught.” The foul air must be made to move out, and the fresh air must be made to come in; and these exchanges of impure for pure air all depend upon the laws of motion.

The vital questions to be decided are:

- (1.) How swift shall be the current of moving air?
- (2.) How frequently shall the air in a hospital be entirely changed?

A rapid draught may cause discomfort, or even danger to the patients; as rapid draughts of cold air induce attacks of influenza, bronchitis, and pneumonia. If the volume of air moves too slowly through a hospital ward, then there is danger that some of the impurities may remain, and thus produce disease. It is claimed that the best and safest rate of motion of air in a ward is about two miles per hour. Much, however, depends upon the condition of the air itself—its temperature, and its humidity. In summer, ventilation may be secured through

windows and doors. The best method of window ventilation is: raise the lower sash six or eight inches, and let down the upper sash about the same distance. Much of the impure air is lighter than common air; hence these impurities escape if the upper sash is lowered. The currents of fresh air coming in through the lower opening facilitate the transmission of foul air to the upper regions.

The best ventilation, by means of windows or doors, could be secured if each room or ward was supplied with French windows extending from the floor to the ceiling. These, when opened wide, favor the free passage of air, and if there are enough of these windows the atmosphere in a room or ward soon becomes like the atmosphere out of doors—entirely pure, and free from odors.

It should be the aim of all who are in charge of hospitals for the sick to keep the air of the wards as pure and fresh as that which is uncovered by any roof, and which has been made fresh and invigorating by the cleansing blows of the pelting storm, and the actinic rays of the noonday sun.

In winter the proper ventilation of wards and hospitals is a more difficult task to accomplish than during the summer. During the cold season ventilation must be associated with the heating apparatus. Fresh air should be sent into the ward by passing it over hot steam-coils or pipes filled with hot water. Foul air must be taken away through conduits extending to the attic, and these should be connected with a large cylinder furnished with steam pipes to rarify the air and produce a draught; and above the cylinder there should be constructed suitable ventilators for the exit of the impure and exhausted air of the wards. By means of a suitable steam-heating apparatus, fresh air may be driven into the wards constantly, and foul air may be drawn out of the wards by the means already alluded to. The impure air is rarified by heat, and drawn up, through pipes or hollow tubing, until it reaches the peak of the attic, and thence it passes into the open air through suitable ventilators.

While the air in a hospital ward can be properly heated and systematically distributed, and while the impurities, as a rule, may be drawn up and forced out at the top of the building, yet we believe that the French window and the open-door system

of changing absolutely and completely all the air in the ward should be resorted to from time to time. By the ordinary processes of heating and ventilation the air is, for the most part, kept in fairly pure state; but some of the fresh air is constantly coming in contact with the impure air which has not yet fully departed, and consequently there remain, even in a well-ventilated ward, some of its native and inherent impurities. These can only be removed by an absolute, speedy and complete change by opening all the sides of the house, so to speak, at suitable intervals—that is, by opening the French windows and the large doors.

The heating of a hospital building may be carried on by the indirect method, or by the direct-indirect, or by the direct method. By the indirect method the steam coils are all kept in the basement, and thus space is economized in the ward. The indirect method is best for violent, or disturbed, or epileptic patients, as such patients are less likely to be injured by the indirect method of heating than by the direct. When the radiators are in the wards the epileptic patients fall upon them when having fits, and now and then a violent patient will attack a radiator when it is hot, as if it were an enemy, and in that way he gets burned.

The direct-indirect method of heating is a combination of direct heating and ventilation from out doors. The same objections apply to it as to the direct method.

The indirect method is probably the best, except that it may have to be supplemented in cold corners of the building by carrying the steam direct to these exposed points.

The steam-heating of hospital buildings has been carried to a very satisfactory pitch of perfection, and this method of heating will probably continue until superseded by electricity.

Some prefer the hot-water method of heating, but this system requires a large amount of large pipes, and these occupy much space, and that would be a serious objection if it was desirable to use the direct method of heating. In case a pipe breaks in a system where hot water is used for heating, the flooding of the rooms and wards might be an additional objection.

As a conclusion, we think that the indirect method of heating buildings by steam, supplemented by the direct method for

the protection of exposed parts of the building, would, on the whole, meet the requirements for heat in a good hospital in a satisfactory manner.

Protection Against Fire.—Every hospital should be carefully protected against the ravages of fire. This is a prime necessity. In each large public hospital there should be a well-organized fire brigade. The members of this brigade should consist of those who work in the engineer's department, and of the attendants and nurses upon the wards. They should be regularly drilled at frequent intervals in the handling of apparatus to be used for the putting out of fires. There should be in each hospital a system of electric fire-alarms, so constructed as to reveal at the outset the exact location of the fire. There should be an abundant water-supply for fire purposes, and it should be distributed by means of pipes through every ward, and by means of hydrants on every side of the building exteriorly. Each institution should have a hose-house and an abundance of hose rolled upon carriages and always ready to attach to the hydrants in case of a conflagration. A portable fire-engine would also be a desirable addition to the fire apparatus. Every hose should be supplied with a ball nozzle—the most effective nozzle in use at the present time.

In addition to the foregoing, each ward of each building should be supplied with portable fire-extinguishers of approved pattern and tested capability. Hand-grenades, fire-pails, water in barrels and tubs should also be provided, and within easy reach of the employees, especially at night.

Above and beyond all the measures heretofore suggested, we believe that a system of automatic water-sprinklers should be installed in every room, and every ward, and every basement, and every attic of every building devoted to the care of the insane. We have already written to the effect that the greatest horror that can befall an institution where the helpless sick are housed is the calamity of fire. It is almost impossible to put out a fire when once fairly started. Each ventilating shaft, or clothes chute, or elevator passageway becomes, in the hour of fire, a chimney through which the flames are forced with a draught that equals the most elaborate and scientific boiler-house smokestack. Hence, when a fire is once started, it is, as we have remarked, almost impossible to check it. Therefore

it becomes our duty to prevent fires rather than indulge in the almost useless task of trying to put them out after they are once started. Hence every new building designed for the care of the insane should be protected by a method known as the "automatic fire-extinguishing system." This system consists of a series of pipes which pass to every ward and room in each building. At proper intervals these automatic sprinklers are placed, and when any one of them is brought to a heat of 160° F. a cap, which is held in place by soft solder, is released, and a most vigorous diffusion of spray follows. This spray strikes the ceiling, the side walls, and the floors, and is generally successful in extinguishing all incipient fires. This system does not rely upon the tardy discoveries of a sleepy night-watch, but it works without direction or command vigorously and effectively whenever and wherever the first flames of a kindling conflagration bring the heat of a room or hall to 160° Fahrenheit. The automatic water sprinkler is probably the best and safest means for the prevention of large fires by putting out the small ones while they are yet in an incipient stage of development.

In addition to protective measures for the purpose of putting out fires, there should also be provision made in every hospital for the speedy and safe escape of inmates from the buildings in case a fire should occur. If future structures designed for the care of the insane shall be only two stories in height, then the danger from fire will be lessened. But in any event, it is wise to prepare beforehand for every possible disaster. We have examined into the merits of several varieties of fire-escapes, ranging from the simple iron ladder on to an elaborate and wire-protected iron stairway. With the latter, when made wide enough, sick patients may be carried down on cots, if they are unable to walk. But a fire-escape composed of iron "treads and risers," and protected by wire screens, is liable in time of fire to be filled with smoke and flame, in which case it would be almost impossible to utilize it in those conditions. There is a fire-escape constructed upon the *cylindrico-spiral* plan which is safe and sure and speedy in its delivery. It is called the "Kirker-Bender" fire-escape, and is made by the Dow Wire Works Company, of Louisville, Ky. This escape is six feet in diameter. It is cylindrical in form, and its outer shell is com-

posed of steel plates tightly riveted together. Within is a spiral chute. This chute is fastened to and supported by the external cylinder. In the centre is an iron pipe, which may be used as a conduit for water. The chute is fastened centrally to this pipe. Down this steel spiral structure patients may slide very rapidly and without danger to themselves or anyone else. People enter the cylinder by passing through two iron doors, one closing behind the person before the second is opened. This keeps back the smoke and flame to a very large extent. If the fire reaches and heats the cylinder at any point it may be cooled from without by the application of a stream of water.

Dr. H. K. Pusey, Superintendent of the Central Kentucky Asylum for the Insane, Lakeland, Ky., has had experience with this variety of fire-escapes, and he writes to me as follows:

“For celerity, ease and safety of escape nothing else compares with them. Persons entering the escape from each floor at the same time never come in contact or collide. In tests, I have seen sixty-eight persons come through one of these escapes in one minute. Our patients are always ready for a ride through the fire-escape. We have never had one injured or hurt in these drills.

“This fire-escape practically renders the taller stories as safe as the ground floors. As their operation becomes understood I feel sure that their application will become general.”

We cannot lay too much stress upon the necessity for securing, for all new buildings at least, the most modern, the best, and the most expeditious provisions for either extinguishing fires or escaping from them.

Furniture.—The furniture for the use of the insane should be plain, simple and strong, but comfortable. The beds should be woven wire, and the mattresses should be made of either the best of hair or the best of cotton felt. The cotton felt mattress of proper quality is pliable and soft, and does not get lumpy or mat like a hair mattress. For these reasons the felt mattress seems to me to be most appropriate for bed patients. Patients who are constantly in bed upon hair mattresses are apt to have their skin irritated by the occasional protrusion through the mattress of a sharp end of a stiff and half-curved

hair. This does not occur where the best of elastic cotton felt is used.

Each hospital should be furnished (aside from a bed and table for each patient) with large, luxurious, well-padded, rocking-chairs; also invalid-chairs. Some should be padded and covered with leather; some may be covered with cloth, while others may be made with splint-bottoms and backs, to accommodate the previous customs of those who are sent to the hospital for treatment.

Baths—Spray, Tub and Sponge.—Every hospital should be abundantly supplied with facilities for bathing. The old-fashioned tub-bath is of great value in some cases, where it is desirable to apply heat and moisture to the entire surface of the body. Long-continued tub-baths are apt to produce a debilitating effect, but where there is great mental excitement or physical unrest the use of the tub-bath to a moderate extent tends to produce quiet, rest, and calm of mind and nerves.

During the past three years we have been using a new form of bathing by means of what is known as the "rain or spray bath." By the use of this bath patients may be rapidly and thoroughly cleansed of all surface filth. Using the hot- and cold-water mixer in connection with the spray, we are able to apply water of any desired heat or coldness to the body. By operating the valve and elevating the spray we may apply water as gently as the rain that falls from the cloud. By giving another turn to the valve and by depressing the spray we may apply water with a fine, stimulating force; and in this way we can stir to renewed action the worn and exhausted sub-cutaneous nerves. The capillary system is likewise stimulated by this means, and thus the flow of blood throughout the system is increased after the first shock, both in volume and rapidity.

We usually apply the spray-bath as warm as can comfortably be borne at first, and finish the operation by closing the hot-water valve, and continuing the cold douche for a short time.

The advantages of the spray-bath are:

(a) Each patient gets fresh water direct from the source. No two patients can be bathed in the same tub of dirty water.

(b) The temperature of the spray can be regulated more easily than by almost any other means. This temperature may be continued at an even rate in the bathing of a large

number of patients, or it can be exalted or depressed from time to time, according to the necessities of each individual case, and according to the directions given by the physician in charge.

(c) The spray-bath economizes time in bathing. One spray properly arranged will bathe five men at one time. By giving each group a five-minutes' bath, twelve groups, or sixty men, may be bathed in one hour. With the old-fashioned tub, where the tub must be cleaned and the water drawn after each bath, not more than five or six men can possibly be bathed in one hour. The saving of time in an institution where there are ten hundred or twelve hundred patients can readily be observed.

If the patient is very restless and will not remain in the spray, we then use a shampoo spray, which is attached to a long rubber tube, and which can be carried to any portion of the bath-room.

If the patient is very weak and unable to take either a tub or a spray-bath, then the sponge-bath may be resorted to, and warm water and alcohol applied to the body of the sick man by the skilled nurse after the usual methods.

Dietetics.—Most cases of acute mania or acute melancholia are best recuperated by the use of a suitable diet. Many cases of melancholia are unwilling to eat, but may be persuaded to drink a glass of milk voluntarily. Many cases of acute mania are indifferent to food, because their hyperstimulated imaginations lead their thoughts into other channels than that of self-preservation. These indifferent maniacs may be induced to drink a glass of milk, or some other liquid food, by a little gentle persuasion.

After many experiments we have concluded that the use of a *hot liquid diet* is best for most cases of acute insanity. This is true whether we apply the statement to those who suffer with mental exaltation or to those who suffer with mental depression. The basis of this hot liquid diet is milk. Milk is the almost universal and "chief nourisher at life's feast." But there are valuable adjuncts to milk. Among these we may name beef tea as a stimulant, chicken broth, mutton broth, and clam broth as emollients, and soothing and appetizing for those who suffer from weak and capricious appetites. Boiled rice is useful as a light, plain, easily digested food. It may be

given with milk, or with any of the broths which we have mentioned.

We have found the following mixture to be pre-eminently satisfactory in many cases:

Hot milk,	.	.	.	.	.	.	.	½ pint.
Mellin's food,	.	.	.	.	.	.	.	1 tablespoonful.
Bovine,	.	.	.	.	.	.	.	1 teaspoonful.

Here we have a mixture of blood, and grain, and milk; and this preparation seems to meet all the demands of a system that is worn by disease and in need of recuperation.

If solid food is required by some weak patients, they may have toasted bread in addition to their milk and broth. As they proceed toward recovery, then a larger variety of food may be given. The character of the soup may be tempered with various kinds of vegetables and meats. The best portions of the beef or mutton carcasses may be cut in small cubes and put in the soup, thus furnishing a strengthening diet, as well as an appetizing one. Sometimes fish and clam chowder may be substituted for the soups with good advantage.

A variety of breadstuffs is desirable. The majority of people prefer white bread from which the shell and the strength of the wheat have been extracted to a large degree. This kind of bread must be furnished to satisfy the popular or acquired demand. But patients who are convalescing from insanity should be encouraged to eat bread made from whole wheat flour, or bread made from rye flour; or, in cold weather bread made from corn, or porridge made from oats may be given. When sufficient strength has been gained by the persistent use of a hot liquid diet, then every variety of good food that can be secured should be afforded to the acute insane. Meats, and fish, and other sea foods, and grains, and vegetables, and fruits should all be prepared and served in a tempting manner to those who are seeking recovery from the Laocoonic toils of insanity.

Stimulants for the Insane.—Stimulants are rarely needed for those suffering with insanity. The brain is in a hypersensitive condition in such cases, and cannot well endure the added irritation which comes from the use of alcoholic liquors. Yet there are cases of great debility, where the stomach is too

weak to retain and digest food, and where champagne in small doses may be administered with beneficial effects. Sometimes brandy or whisky may be needed to stimulate the flagging energies of a weak and failing heart, but such recourse is an infrequent necessity. When stimulants are given, only the best and purest articles should be employed.

Rest Treatment for the Acute Insane.—Those who suffer with acute insanity are often exceedingly restless, and inclined to over-exertion of the most painful and exhausting nature. Cases of acute mania will run and shout throughout the day, and, troubled with insomnia, they fill the hours of the night with wailing of the voice and with unceasing physical action. Many of these cases are like runaway horses. They will continue to run in frantic and frenzied effort long after they have escaped from the cause which impelled the start. To stop a runaway team requires sometimes vigorous measures. The bits must be grasped, and the frightened steeds must be brought to their haunches, if need be, in order to stop them, and relieve them of their fears. It seems to me that the unthinking maniac, who has lost the power of exercising his will and his judgment, should be placed in bed and kept there until, like the runaway horse, his motions have been absolutely checked, and he is calmed, and quieted, and relieved.

It seems to me that the maniacal patient is more quickly quieted when in bed than when dressed and allowed free and full exercise, unrestrained by his own will or the will of others. The strength of the patient is conserved, and he is more likely to recover and less likely to die when in bed than when up and dressed. If the runaway horse is not checked he will run until he drops from exhaustion, and either dies or becomes a badly injured animal. So it is with the maniac when his actions are unbridled and unchecked by any limiting or restraining forces.

Cases of acute melancholia generally improve more rapidly when in bed than when dressed. They are more likely to eat and sleep when kept in bed than when otherwise disposed of.

Patients who are kept in bed require an extra amount of care from the trained nurses. They must be bathed frequently, they must be afforded the benefits of rubbing and massage, in order to overcome any possible ill-effects of the reclining position.

Patients suffering with general paresis or dementia are more

safely cared for in bed than anywhere else. Patients who have weak hearts are much safer in bed than they are when permitted to walk around the wards. The work of digestion and assimilation and distribution of blood throughout the system is most easily effected when the patient is placed in a clean and comfortable bed and properly attended by well-trained nurses. Patients in bed are apt to excite the sympathy of their nurses more than if they were dressed and apparently as strong and well as ever; and it is certain that no class of patients need and deserve sympathy more than do the insane. It is a singular fact that after a patient has experienced the bed treatment for a few days he becomes accustomed to it, and makes fewer complaints when in bed than when out of it. Sometimes the patients are allowed to get up and dress prematurely, in which case they have another attack of maniacal excitement. Many patients who have experienced the benefits of bed treatment will return voluntarily to their beds upon the accession of another attack of mental excitement. Of course there are cases where bed treatment is not readily accepted, where it is even resisted with considerable vigor. Then the attending physician must consider the advisability of continuing needful rest, or of trying the change of exercise or occupation. It should be the aim of the philosophic physician engaged in the care and treatment of the insane to obey the scriptural injunction: "Prove all things; hold fast that which is good." A physician in charge of the insane should strive to keep his mind free from prejudice, and to look with toleration upon every suggestion of new or novel treatment of the sick. This does not mean that he should throw away his well-formed and settled principles, but he should remember that all the good of the world cannot be concentrated in one idea, or thought, or purpose, or principle. The most comprehensive and all-embracing rule is the Golden Rule. That should apply at all times in the treatment of the insane; but it is well to remember that this rule is replete with liberty in thought, as well as in action.

Occupation After Rest.—The primal curse was: "In the sweat of thy face thou shalt eat thy bread." This curse seems to continue in force down to the present time. By sweatful toil we continue to expiate the sins of our first parents. Shall we

ever outgrow the terms of the original penalty? We may state that there have been some modifications of the curse, and that steam and electricity are now doing a portion of the work of man and beast. Further amelioration, especially for the sick, is to be attained by engaging in occupation that is light and agreeable, instead of toil that is hard and painful. Thus old things pass away, and some things become new.

After the acute insane have been afforded the benefits of a protracted season of rest and refreshment, then renewal of occupation seems desirable. It is in accordance with the customs and conditions of life that the partially recovered insane are afforded opportunities for occupation and labor. Many believe that occupation or toil or labor should be the daily lot of the acute insane, and that rest is an unnecessary and undesirable privilege. This question is not yet thoroughly settled, and we can only say that in our opinion, based upon considerable experience, the acute, and frequently much-worn insane, should have rest first and occupation afterwards. The excited yet exhausted and the worn-out yet uncontrollable insane when first brought to a hospital for treatment should see inscribed above the portals at the entrance those blessed words of the great healing Master, "Come unto Me all ye that labor and are heavy laden, and I will give you rest." After that rest has been sufficient and satisfactory, then the spirit of industry should be invoked, and occupation should be afforded to the improving patients. While toil is the essence of an ancient curse, it is proper to remember that nothing useful or good can be achieved in this world except by work. To make the task of toil a pleasant one is to annihilate the horrors of the curse. For our patients, then, we should select occupations which will be agreeable and satisfactory.

Occupation should be either manual or mental, either practical or æsthetic, according to the individual needs of each case. Some may work in the garden or in the fields of the farm; some may assist in the boiler-house, or laundry, or upon the wards; some may write and set type; some may cultivate carrots, while others may devote their powers to the production of carnations. One man enjoys farming, another the work in the garden, and still another prefers the floral department; and there are those who do not like manual labor of

any kind, and for such mental employment should be provided. We have lawyers and doctors and teachers with scholarly impulses, and these ought to be allowed to write and put their thoughts upon the printed page, and disseminate them for their own pleasure, if not for the profit of others.

Amusement.—Interspersed with all occupation should be found the stimulating and stirring principle of amusement. Each day of toil should be followed by an evening of relaxation, in which music and kindred arts of pleasurable allurements may lead the soul away from the cares and the distresses of life. When the insane are recovering they should have all the pleasures and amusements to which they are accustomed in times of health. There should be pictures upon the walls and adornments for the windows, and soft carpets for the feet; and books and portfolios filled with the rarest productions of art; and these should be supplied in such profusion and variety as to stir and engage and interest the most sluggish victim of mental obfuscation.

Moral Hygiene.—The victim of mental disease suffers always, to a greater or less extent, with a loss of self-control. Loss of self-control on the part of mental invalids is the great, central cause which leads to hospital treatment for the insane. If the insane could control themselves under the visitation of insanity they would not be compelled to accept those terms of hospital treatment which now seem indispensable. While these victims of insanity are being restored to bodily health and strength, they should at the same time be subjected to that moral hygiene or instructive influence which shall impress upon them the necessity for resuming and exercising their natural self-control—a condition which once made them good citizens of the commonwealth.

In the care of insane persons we should seek to stimulate them to care for themselves as soon as possible, and to refrain from injuring either themselves or others. Restraint should consist of moral injunctions rather than physical appliances. If necessary, however, the protection sheet may be applied in some cases. By using the protection sheet, which is made entirely of cloth, we dispense with the use of iron, and wood, and leather, a custom which once prevailed when muffs and anklets and cribs were the prescribed means of restraint.

The protection sheet, when properly made and carefully applied by skilled nurses, becomes as easy and effective in its use as the swathings with which the mother envelops her child as she places it in the cradle. But even the protection sheet should be discontinued as soon as the patient, by repeated moral injunction, learns to restrain and control and protect himself. It should only be used as an aid to the skillful trained nurse, and not as a substitute for the nurse.

Open-air Exercise.—Out-door exercise in the open air is thought by many to be a prime and indispensable necessity. This is true with regard to those who live in small, cramped, ill-ventilated, unhealthful houses. The hospital for the insane should be so thoroughly and frequently ventilated that the air therein is just as fresh and just as healthful and life-giving as that which is found outside of bolts and bars and brick walls. By such ventilation the necessity for out-door exercise is not quite so imperative as it otherwise would be. Patients should, however, be taken into the open air, where they can stretch their limbs and exercise their muscles in a most unhindered manner, as soon as they have resumed to a moderate degree the art of self-control.

Exercise for the acute insane after a sufficient period of rest should be very moderate, and cautiously applied at the outset. The resumption of normal functions of activity after severe illness should be conducted entirely under the direction of the attending physician, and he should remember that the exhaustion of disease sometimes afflicts the human body even after the disease has apparently disappeared. Those who have suffered with long illnesses are sometimes permitted to exercise immoderately and without caution, and thus we read of numerous sudden deaths from heart failure and from apoplexy, which are due probably to weaknesses incurred during the hours of illness and imperfect convalescence.

In the care and treatment of the insane great caution should be exercised while the almost recovered are completing the term of convalescence. As the twilight and the dawn are most dangerous seasons for those of suicidal tendencies, so the last days of convalescence, when the recovering person is feeling once more the impulses of recovery, are oftentimes critical periods which need especial attention.

The "open-door system" is advocated for the benefit of those who are happily convalescing, or for those whose minds have become so enfeebled that an escape is not likely to be attempted. But while patients should be allowed every possible freedom, yet those who are in an uncertain condition of mind should be watched over and guarded from injury by nurses who are alert and careful. Sensitive patients should be looked after constantly, but they need not be aware of the fact if the task of watching is discreetly performed.

Physical Culture and Mental Stimulus.—We hear a good deal about labor and work and toil, and occupation for the benefit of the insane, but we do not hear so much about physical culture for the victims of mental disease. A good deal of mental disorder is caused by physical mal-environment. A slight blow upon the skull in early life will produce a change in the proper growth of the skull. This change may lead to abnormal action of the brain, and consequently a departure from the normal mental status. A physical abnormality in any part of the body may produce a mental anxiety and worriment that finally results either in profound melancholy or in the benumbing conditions of mental failure. We believe that hospitals for the insane should now be furnished with gymnasiums, and with a teacher who may instruct the patients in the art of physical reformation. It has been noticed that insane patients walk in a careless, shiftless, slovenly, hopeless manner. We have observed that when cases of melancholia recover they renew, to a certain extent, that elasticity of step and carriage which denotes healthfulness of the body and hopefulness of the heart. By means of gymnasiums many patients may be taught to assume correct and healthful positions; they may also be taught to exercise properly the muscles of the body, and likewise they may be instructed and educated in the marvelous and necessary task of correct breathing. Our male patients might be equipped with military arms, and taught the positions and tactics of the soldier; and the women patients may likewise be trained in all the elegancies and graces of the Delsarte system.

By means of proper physical culture, practically applied, I believe that the insane may be greatly improved in their conditions, both physically and mentally; and therefore we would

suggest that in every new hospital for the insane, and likewise in every old one, there should be all the means and appliances and teachings necessary for the development of correct and satisfactory physical culture of the insane. After an appropriate period of rest we should use, as means for curing the insane, not toil, not labor, not hard work, but correct physical culture. After that we may apply agreeable occupation. The hospital should, in a certain sense, be a training school for the development of all the powers of mind and body before those powers are put back into the ways and courses of industrial pursuits. When the insane are taught to breathe and walk and stand and move in accordance with the best known and developed methods of physical culture, then we shall find in them an improvement in the quality of the blood, an improvement in the quality of their action, and a consequent improvement in the quality of nerve tone and mental activity.

Daily Care of the Body.—We have spoken about buildings for the insane and baths and other matters, and we have spoken of rebuilding the body by means of suitable diet and care, and the necessary moral hygiene in the care of the insane. We have also spoken of physical culture and its prospective effects. We shall close this report by stating that the care of the body is a matter of imperative necessity, both to the well and to the sick. Those who are recovering from serious disorders should be put in training, and taught to care for their bodies in a proper manner throughout their coming lives. They should be taught not only to take proper food and proper exercise and proper baths, but they should be enjoined to rake down the ashes from the human boiler with becoming regularity and uninterrupted uniformity. The excretory organs should be cared for with the most diligent and scrupulous persistence. If, after toil and neglect, it is found that the patient's bowels are overloaded with decaying waste material, then he should be urged to cleanse himself frequently (every day or two) with enemas of pure warm water. These should be repeated until the bowels are in as clean a condition as it is possible to get them. The stomach may be cleansed each morning by the drinking of hot water. All the *viæ vitalis* should be washed and cleansed at regular and frequent intervals. The bladder should be evacuated as often as once in from four to six hours,

and this should come to be a practical and steady habit of the patient.

Nurses and Training Schools.—In the care of the acute insane, and in the application of means and measures already suggested, it is now a recognized necessity that the nurses in charge of the wards and the hospitals should be thoroughly trained in the performance of their duties. No class of patients suffering with any form of disease demands more skillful care than the insane; hence the duty of establishing training schools for nurses in all the State hospitals of this Commonwealth has been crystallized into a well-formed and probably durable law.

Nurses for the insane should be young, strong, diligent, tactful, conscientious, and, above all, their hearts should be permeated with love for their work, and their minds should be impelled to action under the continuous influence of the subtle, all-powerful spirit of cheerfulness. A cheerful, hopeful countenance is a benediction wherever it appears, but to the sick man, afflicted with mental disorder, it is a perpetual inspiration.

Medication.—In matters of medication it is proper to state that in the care of the acute insane great caution should be exercised in the administration of drugs. It is believed by many that the overpowering use of poisonous and nerve-numbing drugs tends to the injury of the brain and to the production of mental failure. Therefore we believe that the proper medication of the acute insane is by means of mild and moderate doses, which modern scientific experimentation has demonstrated to be most effective and least dangerous. Preventive medicine will, I believe, offer the greatest relief to mental invalids in the future. To immunize the human system from all the microbes of disease is to drive out insanity from the land.

A STUDY OF DIABETES MELLITUS.

BY W. F. MARKS, M.D., READING, PA.

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DEFINITION.—A cachetic, constitutional chronic disease, characterized by mal-assimilation of food and by an excessive

discharge of pale, sweet and heavy urine, containing grape-sugar. There are two diseases to which the term diabetes has been applied—Diabetes Mellitus and Diabetes Insipidus. They resemble each other in the copious secretion of urine; but in the latter disease, which is comparatively rare, the urine contains no abnormal ingredients, is clear and colorless, and of low specific gravity (1000 to 1007). Thirst, a dry, harsh skin, and mental and physical weakness, are generally present. The simple name Diabetes applies to the former disease. What causes diabetes? There is no disease concerning which so much accurate knowledge has been arrived at and of the true pathology of which we are so thoroughly in the dark. It is not a kidney disease, as was once supposed in its early history, although this impression still prevails among the laity; and naturally so, because the essential evidence of its existence is found in the urine. What more do we know? We know, further, that diabetes occurs under very different circumstances. We can produce diabetes in an animal by irritating the floor of the fourth ventricle, as originally done by Claude Bernard in his celebrated figure experiment.

There are, however, also, other parts of the nervous system, the irritation of which will produce, though less promptly, diabetes, from the cerebellum down to the point of emergence of the sympathetic system to the viscera. It is commonly admitted that this experimental glycosuria is caused by a centrifugal stimulus from the nervous centres to the liver-cells. We know also that tumors impinging on the floor of the fourth ventricle, injuries of this part of the brain, and abscesses, are attended by diabetes; also injuries to the spinal cord, and diseases of the pancreas and hepatic organic disease, alcohol in excess, mental, sexual abuse, opium, syphilis, pregnancy, tapeworm, are ascribed causes. Clinical experience teaches the same thing, namely, a greater frequency of this disease among the well-to-do classes; and in a large proportion of cases a careful inquiry into the habits of the individual shows an inordinate use of the starches, fats and nutritive materials in general. Porter states, pathologically, the only positive lesions, as far as known, are to be found in the liver and kidneys.

Treatment also aids in sustaining the super-nutrition theory, for it is a well-known clinical fact that a nitrogeneous diet, aided

by such medical agents as steady both the nervous and circulatory systems, especially the latter, affords the greatest relief.

Diabetic Complications.—Circulatory symptoms—are specially confined to the heart, which is often weak and intermittent, and calls for special therapeutic attention.

Nervous Symptoms.—These are muscular weaknesses and trembling, and a diminution in the sexual desire, perhaps no more than in any wasting disease. Headaches, abdominal, gastric and wandering pains throughout the body, are not uncommon.

Respiratory Symptoms.—The breath has been described as emitting a peculiar apple-like odor. It, like the coma, has been ascribed to acetonæmia, but it is probably of the same origin as that in connection with uræmia.

Coma.—This condition, from the peculiar reaction given to the urine by the chloride of iron, is believed to be due to the development of acetonæmia, or acetone in the blood. The opinion advanced by Dr. Satterthwaite and others that the coma, and death which frequently ensues, is developed in precisely the same way as that of renal lesion proper, seems to be established by the more recent investigations. The stupor or coma is insidious in its origin; there may be some prostration, headache, restlessness, and anxiety, epigastric pains, nausea and vomiting, just what precedes any uræmic coma. The urine is diminished in amount, and sugar abundant, or total suppression is developed. The albumin and cast become more plentiful. Porter mentions that in one instance the quantity of urine fell from 250 ounces to 150 ounces in twenty-four hours, and during the twelve hours just prior to death there was absolute suppression; at the necropsy the bladder was empty and firmly contracted.

The pulse at first is high, small and quick, but soon becomes weak, often intermits, and is absent at the wrist; the temperature at first is a little elevated, but soon falls to normal or below. The breathing is rapid, labored and superficial; in some instances the mind is disturbed, and delirium precedes the coma. The decrease in the quantity of urine and sugar and an increase in albumin and casts should always be looked upon with anxiety, and fatal coma suspected in the near future.

Ocular Symptoms.—A number of lesions have been narrated

in connection with this disease. Diabetic cataract, with a loss of vision, is perhaps as frequently mentioned as any. But all the lesions that occur in any form of chronic renal disease may be met with, viz., retinal thrombosis, embolism, hæmorrhage, oratrophy, fatty embolisms of the retinae, and the various forms of retinitis and neuro-retinitis. With these, there will be specks before the eyes, dimness of vision, or blindness. An ophthalmoscopic examination only can decide the nature of the lesions. The acuteness of hearing is in some instances diminished, but more often tinnitus aurium is a troublesome symptom. It appears from clinical observation that sugar, like urea, is occasionally eliminated by all the excretory glands, and hence the finding of glucose in the perspiration, tears and other excretions and secretions is explained. This, however, does not seem to be of frequent occurrence and is somewhat doubtful.

Integumental Lesions and Symptoms.—Extreme dryness of the skin is among the early symptoms, with the complicating lesions of the lungs; hectic sweats may become marked; unilateral sweating has been noted in a few cases; itching of the skin, sometimes extending over the greater part of the body. But this symptom is usually most marked in females and is limited to the genital regions, and appears to be excited by the frequent micturition and accumulation of the saccharine particles among hairs of the parts. The meatus urinarius in males becomes irritated and inflamed. An eczematous erythema is occasionally developed; pruritus vulvæ, also, in many cases, which caused me to study and examine the urine for sugar; and rhus aromatic, 10 gtts. four hours apart, has benefited every case. Late in the disease, furuncles and even carbuncles are developed, and the latter may act as a potent cause in producing a fatal issue. Spontaneous thrombosis and consecutive gangrene of the extremities or other parts is also met with in 5 to 6 per cent. of the cases. If the lungs are included, it is much more frequent. Any slight injury may be sufficient to excite a destructive inflammation. Falling out of the nails has been observed.

CHANCROID—ITS TREATMENT WITH ARGONIN A STUDY.

BY J. C. MILLEN, M.D., PHILADELPHIA.

DURING the latter part of the summer I became familiar with the extensive experiments with argonin made by Dr. George K. Swinburne in the treatment of gonorrhœa. His results elicited my admiration, and I began the use of this preparation in my gonorrhœal cases, both public and private. While pursuing the study of its effects, a patient presented himself for the treatment of a chancroid situated on the under side of the glans penis, and occupying the place of the frænum, which had sloughed away. The sore had existed for three weeks, and followed three days after coition. Despite cleanliness, it had progressed until, at the first visit, the area involved, while irregular in outline, measured about one-half of an inch in length and of almost equal breadth. The appearance was characteristic of a chancroidal ulcer, the discharge was profuse, and there existed double inguinal adenitis.

The sore was washed with a 1 : 2000 solution of bichloride of mercury, dried, and then cauterized with pure nitrate of silver. On the following day it was again irrigated, dusted with subiodide of bismuth, and the patient instructed to wash the ulcer three or four times a day with a bichloride solution of the strength of the one used at first, dust with bismuth subiodide, and then dress with fresh gauze. Three days later he reported his condition as being no better, but the same treatment was continued, and the patient not seen for ten days, during which interval he was absent from the city, but had dressed the chancroid as instructed. The condition had now become aggravated; the sore had extended to the meatus, but without involvement of the urethra. A mild grade of paraphimosis existed, and in each inguinal region was an impending bubo.

The entire genital region and its surroundings were thoroughly cleansed, the ulcer cauterized at once with nitric acid, dusted with bismuth subiodide, and dressed. To prevent reinfection the penis and dressings were wrapped in sterile gauze and the patient instructed to return home and put on a fresh

suit of underclothing. The tri-daily dressings were continued by the patient for four days, and he again reported. There was no improvement in the sore, and the urethra had become involved to the depth of a quarter of an inch. The paraphimosis was increased and required reduction, which was accomplished with difficulty, while the discharge from the penis was so profuse as to suggest a gonorrhœa, but a microscopic examination demonstrated the absence of the gonococcus.

It was at this point, in view of the urethral involvement, that argonin suggested itself to me as a possible remedy, and considering the generally unsatisfactory means at our command for the treatment of urethral chancroid, I decided to try it. The parts were washed clean with carbolic solution, 1:50, the urethra irrigated with a 1:2000 solution of the permanganate of potash, and then the preputial sack was filled with a 10 per cent. solution of argonin. This was followed by an injection of a half ounce of the solution into the anterior urethra, and it was held there for five minutes by compressing the meatus. The injection was allowed to run out, a piece of gauze saturated with argonin placed between the prepuce and ulcer, and a plain gauze dressing applied. The patient was instructed not to disturb the dressings, and when he reported back the next day he stated that the discharge had diminished and the pain was gone. On examination the sore presented a cleaner appearance. The same treatment was repeated, and in the succeeding day the condition had materially improved. There was almost no discharge, the prepuce was not in the least œdematous and could be retracted and drawn forward with ease. The ulcer presented a fairly healthy base, and the patient stated that there was less pain in the buboes. The treatment was repeated once more, but at this time the patient was obliged to leave the city on business, a necessity I deeply regretted. However, he was instructed to resume the bichloride and bismuth subiodide dressings. On his return in two weeks' time he called upon me, when to my surprise I found that the ulcer on the glans and in the urethra had completely cicatrized, and the buboes were resolved into two indurated inguinal glands, each one about the size of a chestnut, and not in the least sensitive.

Further treatment was not needed, and the patient was discharged.

Since treating this patient I have used argonin in five cases of chaneroid. To avoid going into wearisome details, I will generalize my results. Four of the cases presented characteristic uncomplicated chaneroid, and the patients stated that the sores had existed for two days in the shortest case and for one week in the longest. All had been untreated, and the sores were spreading gradually. In each case I used argonin from the beginning.

The method adopted was to first clean the ulcer and surrounding surfaces with a solution of carbolic acid, 1:50 (used in preference to bichloride of mercury, as the latter combines chemically with argonin). The denuded surface was mopped dry with absorbent cotton, and a few drops of a 10 per cent. solution of argonin poured upon the sore. Over this was laid a small piece of gauze saturated with the drug, and over all the usual gauze dressing. This was not renewed until the following day.

In all of the cases treated the character of the sore changed, in from two to four days, from an unhealthy, sloughing ulcer to a clean, healthy, granulating surface, and within two weeks cicatrization was complete in four of the cases. Four or five dressings of argonin were employed, and then the treatment was changed to tri-daily irrigations with 1:50 solution of carbolic acid and the sore dusted with bismuth subiodide.

The fifth case is worthy of special mention. A phimosis existed, and the foreskin was so indurated that it was impossible to retract it. One distinct, circumscribed induration could be made out at the balano-preputial junction, but it was impossible to judge of the number or extent of the sores. The preputial margin exhibited three small ulcers, and pus was present in abundance. This case represents a type which all who are familiar with this class of work find little pleasure in treating.

The balano-preputial sack was cleaned by the aid of a syringe with the carbolic solution 1:50, inserting the nozzle in the preputial opening and injecting until the solution ran out clear. After the irrigation the sack was filled from a syringe with a 10 per cent. solution of argonin, held in for about ten minutes. A piece of gauze saturated with argonin was placed over and around the end of the prepuce and covered with dry gauze to protect the clothing. This was retained until the next urination, when it was removed and discarded, and replaced by a

piece of absorbent cotton to catch the discharge. This treatment was maintained for four days, during which time the discharge diminished in amount. The induration about the foreskin lessened, and on the fifth visit I was able to retract the prepuce, exposing a ragged ulcer occupying the dorsal position and involving both prepuce and glans. The same treatment was continued, and, in addition, a piece of gauze, saturated with a 10 per cent. solution of argonin, was placed over the ulcer and the prepuce drawn forward. This was not removed until the next dressing, but, as a precaution, the patient was instructed to remove the gauze if it became hard or dry enough to cause any irritation. This removal, however, was not found to be necessary.

At the end of three days, making seven days in all, the sores had assumed a healthy, granulating condition, and the argonin dressings were discontinued, the usual irrigation and bismuth subiodide dressings being substituted. There was no interruption in the progress of the case, and it was discharged in three weeks.

If these results can be verified and duplicated, this method of treatment offers many advantages over the diverse, painful, and usually unsatisfactory methods now in vogue. In cases of urethral chancroid, and in chancroid complicated by irreducible phimosis, argonin holds out most alluring inducements for its trial, for it is in such instances that we find ourselves at our wit's end for adequate methods of treatment, the heroic measures to which we are often forced frequently leaving the patient in a most deplorable condition, and we ourselves filled with a sense of our own inefficiency.

The remarkable power of argonin to reduce inflammation and lessen swelling in acute gonorrhœa seems also to attend its use in chancroid. It is probably due to its bacteriacidal power not being accompanied by irritation and tissue necrosis, as is the case with so many of our most valuable germicides. To be able to treat successfully even a percentage of the cases complicated by phimosis, without resort to circumcision, is a great advantage; for how often do we succeed in operating without converting the fresh wound into an extensive chancroidal sore? The danger is also with us in an uncomplicated sore, for the most complete and thorough cauterization, while giving a splendid slough, frequently does no more than prepare

a larger and more extended field for the operation of the virus of this disease.

In urethral chaneroid any measure which offers the chance of minimizing the extent of the necrosis and the deformity from the resulting cicatrix certainly deserves a thorough and conscientious trial, particularly where in itself it is incapable of doing any further damage to a canal so vital and so intolerant of abuse, even though it fail in controlling the disease. In the one case of urethral chaneroid which was treated by this method the patient complained of severe burning, which lasted for at least an hour after the injection; but this is not productive of harm, and is only mentioned to emphasize its unimportance.

The number of dressings necessary in individual cases, the frequency of their change, and the advisability of continuing argonin after the ulcer takes on a healthy appearance, are all subjects which must be decided by an extensive experience. In the cases mentioned the rule followed was to dress once a day, and discontinue the argonin twenty-four hours after the base of the sore showed healthy granulations. It was deemed inadvisable at present to repeat the dressings after this time, as the cicatrizing powers of the drug were unknown and the knowledge not essential to this study, the subject under investigation being the ability of argonin to change the character of a filthy, sloughing sore. With regard to the daily dressing, it might be added that further experience may show the advantage of more frequent changes. If this be necessary, the simplicity of the manipulations will admit of the patient readily making the changes himself by saturating a fresh piece of gauze and applying it to the sore.

To attempt to draw conclusions from so limited a number of cases in a subject of such vital importance as the welfare of a human being may seem foolhardy, but when we consider that in all six of the cases reported the results were uniformly satisfactory, it seems justifiable to assume that this same experience will follow in the general use of the drug in the treatment of the disease. This brief study has been detailed here, therefore, in the hope that others might be induced to make use of argonin and supplement the observations of the writer with their own experience.

THE TREATMENT OF SPECIFIC URETHRITIS.

BY F. WALTER ERIERLY, M.S., M.D.

(Read before the Homœopathic Medical Society of the County of Philadelphia,
March 11, 1897.)

A NEW SURGICAL TREATMENT FOR ANTERIOR URETHRITIS.

EVER since the advent of Listerism every man who has treated a case of urethritis has felt more or less chagrin at his failure to successfully fight a suppurative process in the urethra with antiseptics. The peculiar anatomy of the male urethra and its inaccessibility, together with the fact that it is lined with a membrane whose follicles dip deep into its substance, make it almost impossible to reach the gonococci with ordinary germicides. Last spring, at the Hahnemann Hospital Dispensary, we treated a series of cases by irrigation with a 1 to 200 aqueous solution of formaldehyde. The course of the disease seemed to be shortened, but the daily use of the two-way tube with so many patients was bothersome, the irrigations gave a great deal of pain, and more complications ensued than with other methods of treatment.

In reading the literature of formaldehyde the ideal way of applying this antiseptic seemed to be in combination with gelatine. This substance is sold in a powdered form under the name of glutol. I started to make bougies of glutol, but they were not satisfactory and were very expensive. Then I remembered the old combination of glycerine and gelatine making the copying pad called the polygraph. If formaldehyde would combine with this substance it would make an ideal bougie. But after experimenting throughout the summer I abandoned the bougie idea altogether for something infinitely better. I found that one part of gelatine to six parts of glycerine made a preparation having a melting-point at 105° F.; then when a small portion of formaldehyde was added the melting-point was raised and the solubility greatly lessened. By injecting the warm fluid and letting it remain several minutes, the inside of the urethra becomes plastered with a layer of this soft, jelly-like substance, which under the existing conditions is insoluble in the urine; then by letting the inner portion run out we have a tube protecting the urethra through which the urine may pass. By the action of the tissues on the jelly

the gelatine and glycerine are absorbed and the formaldehyde set free, giving a continuous antiseptis.

The plan was presented to my chief, Dr. Van Lennep, and pleased him so much that he placed the cases in the dispensary at my disposal. I have him to thank, too, for many valuable criticisms, as well as encouragement, in working out this process.

We began this system of treatment about the 1st of October, of last year, using it in all the cases of anterior urethritis that presented themselves, in order that we might find to just what conditions, if any, it was suited.

I present to you to-night the records of the first 115 of these cases. So great is the horror of the lay mind of an injection treatment in the acute stages that 43 of these cases did not return after the first treatment. The accompanying sheets contain the tabular records of the remaining 72. Our technique is as follows: One part of the best gelatine is softened in cold water; it is then placed in cheese-cloth and squeezed as dry as possible. This moist gelatine is dissolved over a water-bath in six parts of glycerine, and two drops of carbolic acid to the ounce added to keep it sterile. This is allowed to cool and becomes our stock-jelly. When we are ready to use it, an ounce of this stock is melted over the water-bath, and five drops of a 40 per cent. aqueous solution of formaldehyde added. The formaldehyde must not be placed in the stock-jelly, for its addition makes the melting-point much higher.

In my private practice, when I make a quantity of the stock-jelly, I pour it while still hot into test tubes, putting about 5ij in each one, and plugging the end with cotton, like an ordinary culture tube. When I want to use it the tube is heated over an alcohol lamp, and a drop of 40 per cent. aqueous solution formaldehyde added.

The patient is instructed to cleanse the urethra by passing his urine in our presence. We never take a patient's word when he says that he has just passed his water. The urethra cleansed, the patient is placed on his back or in a chair, and enough fluid (5ij to 5iv) injected to moderately distend the anterior urethra. No long-continued or great amount of force must be used, or the fluid will pass the safety-valve of the urethra, the triangular ligament. The patient is instructed to come every day for treatment until the discharge becomes mucoid; then he is treated at longer intervals.



Apparatus for Private Use in Left Side of Crime Analysis Case.



Apparatus in Use at the Hospital.

At first, in the acute stages, the injection produces some pain, but it is almost nothing compared to the pain of some other methods of treatment. The pain, too, is all gone in a very short time, and after a few treatments the injection is painless.

In genito-urinary practice the word *cure* is a large one. Our patients do not continue under our care, as a rule, until we pronounce them cured. When the pain has ceased and the discharge no longer soils the clothes we see them no more. So in the analysis of the specific cases I have avoided the word "cure." As an index to the course of the disease, I have taken the amount of pain and the character of discharge. The laborious laboratory work that Dr. Hall has so kindly conducted in connection with our experiments has shown that when the discharge has become mucoid it is practically free from gonococci. Our clinical experience has verified this conclusion. When a patient once reaches this stage his discharge soon ceases. The analysis of the acute and sub-acute cases shows also that all pain ceases at about the same time. In the analysis of the cases I have disregarded the fractions, making the average the nearest whole number. The small variation in the results in the acute specific, chronic and non-specific cases is remarkable.

No case coming to us before the fifth week had any pain after eight injections, and in a number the pain ceased after the first visit. In no case coming in the first four weeks of the disease was the discharge purulent after eight injections, the average in all those presenting themselves during the first week being four injections, during the second week three, and the third week five. The average number of injections before which the discharge became painless varied from three to four in cases in which treatment was instituted during their first week. The seventy-two cases averaged five injections each and eight days of treatment.

The study of individual cases is sometimes more instructive and more useful in drawing conclusions than the analysis of a great number. For instance, in four days after treatment was instituted Case No. 4 had no more pain, and in six days his discharge had ceased. He came in on the ninth day of his discharge with the symptoms usual at that period. Case No. 14, coming to us at the end of the second week, had no more

pain after the first injection, and the discharge almost ceased at the same time. In Case No. 15 the discharge became mucoid and the pain ceased after the first injection, and this, too, at the end of his first week. Case No. 22 showed an increase rather than a decrease in his discharge during the first few days, an unusual course; but after the third day he progressed to a rapid recovery. Though he did not remain long enough for us to be sure of it, it seems that case No. 23 was cured in his first week. Case No. 54 was getting along finely, but not being content with our method of treatment he injected carbolic acid into his urethra, then got drunk and chopped his finger off. With such things we have to contend, and perhaps not only in genito-urinary practice. Case No. 55 came at the end of the second week, and was discharged absolutely cured in ten days. Case No. 58, coming on the sixth day, was discharged in thirteen days, and Case No. 68 is our prize case. He came on the seventh day with a pouting, œdematous meatus, a profuse purulent discharge, great ardor and chordee, and was discharged in a week without a subjective symptom, with no discharge, and without a cloud or shred in his urine.

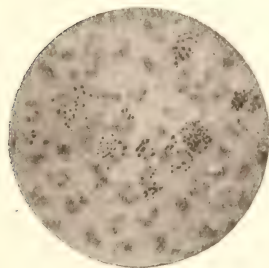
An occasional injection of jelly is useless, and the treatment must not be discontinued until the discharge is free from gonococci, otherwise they rapidly multiply and the case reverts to its original condition. This is well illustrated in cases 18, 33, 43, 44, 48, 64. Case 48 particularly emphasizes this point.

There is one fact about which we are particularly proud. In all these cases we have had no symptoms of posterior urethritis, and but one case of epididymitis. Case No. 9 came to us at the end of his fourth week, and in six days developed a right-sided epididymitis. Fournier places the frequency of epididymitis at 12 per cent.; Sigmund at between 6 and 8.

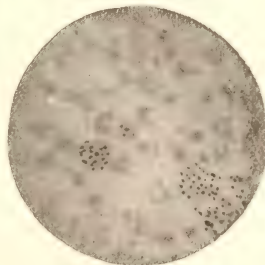
The analysis of the chronic cases and non-specific cases shows but little difference from the acute specific, as far as stopping the discharge is concerned. In the chronic cases having stricture the discharge stopped, but returned again in one or two weeks.

We use the injection in cases having a chronic discharge or an acute exacerbation, and then if a stricture be present proceed with sounding or other operative measures. We like an injection of the jelly after sounding, for it soon kills any bacteria that may have been carried in by the sound. The warm

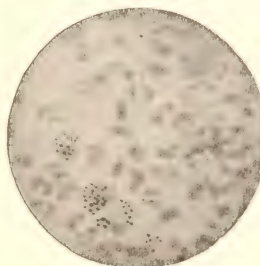
Micro-photographs of Slides Made During Treatment.
(No eye-piece; objective B. & L., oil-immersion $\frac{1}{2}$.)



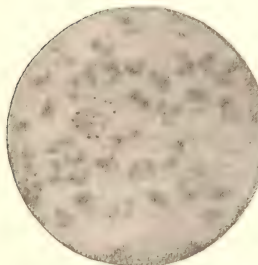
Sixth day of
discharge.
No treatment.



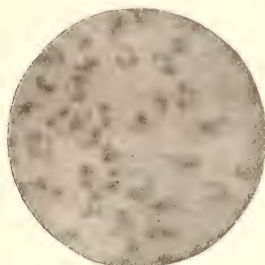
Seventh day of
discharge.
One injection.



Eighth day of
discharge.
Two injections.



Ninth day of
discharge.
Three injections.



Tenth day of
discharge.
Four injections.

jelly makes an excellent lubricant for the sound, and we use it in place of oil, which would adhere to the urethral mucous membrane and prevent the free action of the formaldehyde.

Although the results of the cases in the dispensary have been most excellent, yet for a number of reasons they have not been as satisfactory as in private practice. Our hospital patients are, as a class, overworked or underfed; they will not abstain from alcohol and sexual excitement, nor obey the other rules of hygiene which we lay down. Then these cases missed their injections on Sundays and holidays.

The chemical composition and physical form of this antiseptic hint at endless possibilities in surgery; such, for instance, as the impregnation of gauze, the packing of bone and other cavities, etc. In this substance we have the same chemical and biologic phenomena as in the glutol, but glutol can only be used on the surface. In formaldehyde vapor, or its aqueous solution, we have at best but an evanescent antiseptis; in the chemical combination with glycerine and gelatine antiseptis is prolonged so long as cellular activity continues or the jelly is not all absorbed.

Since January 1st we have continued to use this method in treating our cases of anterior urethritis, and have had the same uniformly good results. From the note-books of Drs. Van Lennep, Ashcraft, Hart, Hassler and Carter, together with my own private cases, I have collected the records of fifty-six cases; these added to those treated at the hospital make a total of 300, and the one case of epididymitis is the sum total of the complications.

The advantages of this method of treatment may be summed up as follows:

1. It may be used in any form or any stage of anterior urethritis.
2. The cases run an uncomplicated course.
3. The pain is greatly decreased.
4. The course is shortened at least to as many weeks as it formerly was months.
5. It is inexpensive.
6. It is free from danger.
7. It is easily prepared and applied.
8. It is comparatively painless.

TABLE No. I.

(Case Number.	Hospital Record.	Diagnosis and Symptoms.	Period of Incubation.	Number of Days Discharge Has Been Present.	Number of Previous Attacks.	1	3	4	5	7	13	16
1	E. 96a.	Subacute spec. ant. urethritis. Purulent discharge and painful mict.	5	21	1	No pain, dis-charge same.	Same.					
2	E. 96b.	Acute specific ant. urethritis. Purulent discharge, painful mict.	3	6	0	Same.	No pain, dis-mucoid.	No pain, no dis.				
3	E. 97a.	Chr. ant. urethritis. Profuse purulent discharge, some ardor urine.	4	8 mos.	0	Less pain, less discharge.	No pain, less dis.	No pain, no dis.		Some ardor, slight dis.	No pain, mucoid dis.	
4	E. 98a.	Acute specific ant. urethritis. Purulent discharge, ardor urine.	3	9	0	Less ardor, dis. same.		No pain, mucoid dis.	No pain, no dis.			
5	E. 99b.	Acute specific ant. urethritis. Purulent discharge, ardor urine.	11	4	0	No pain, sl. pur. dis.		No pain, sl. mu. dis.				
6	E. 99a.	Acute specific ant. urethritis. Mucopurulent discharge.	3	1	0	Slight ardor, dis. same.	Less ardor, less dis.	Same.	No pain, muc-pur. dis.			
7	E. 99a.	Chr. ant. urethritis. Great ardor, profuse purulent discharge.	6	6 wks.	0		No pain, slight mucopur. dis.	No pain, mucoid dis.	No pain, no dis., circumcised.			
8	E. 99a.	Chr. ant. urethritis. No pain, profuse purulent discharge.	7	6 mos.	0	No pain, no dis.						

TABLE I—Continued.

Case Number.	Hospital Record.	Diagnosis and Symptoms.	Period of Incu- bation.	Number of Days Discharge Has Been Present.	Number of Pre- vious Attacks.	Record of Days After Treatment Was Begun.									
						1	3	4	5	7	13	16			
9	E. 597b.	Subacute specific ant. urethritis. Profuse purulent discharge, ardor and chordee.	6	1 mo.	0	Slight chordee, no ar- dor, dis. same	No pain, some pur. dis.	Same.	Right epidid. swollen and painful.						
10	E. 958b.	Acute specific ant. urethritis. Pro- fuse purulent discharge, ardor and chordee.	3	3	0	Less ardor, less chordee, less dis.	Same.	Same.	No pain, slight dis.	No pain, dis. mucoid.					
11	E. 961a.	Subacute spec. ant. urethritis. No pain, profuse purulent discharge.	4	21	0	Same.	Same.		Slight mu- coid dis.	No pain, no dis.					
12	E. 961b.	Acute spec. ant. urethritis. Profuse purulent discharge, great ardor.	12	7	0	Less ardor, less dis.	No pain, less dis.		No pain, slight mu. dis.	No pain, no dis., moshds.					
13	E. 965b.	Chr. ant. urethritis, stricture. Morn- ing drop.		4 mos.	2	Same.	No dis., no shreds.					Return of drop.			
14	E. 966a.	Acute spec. ant. urethritis. Profuse purulent discharge, ardor urinae.	8	14	2	No pain, very slight dis.									
15	E. 970b.	Acute spec. ant. urethritis. Profuse purulent discharge, ardor.	3	8	0	No pain, mu- coid dis.									
16	E. 971b.	Chr. ant. urethritis, stricture. Morn- ing drop.				Same.			No dis., no shreds.						

TABLE I—Continued.

Case Number.	Hospital Record.	Diagnosis and Symptoms.	Period of Incu- bation.	Number of Days Discharge Has Been Present.	Number of Pre- vious Attacks.	Record of Days After Treatment Was Begun.									
						1	3	4	5	7	13	16			
17	E. 972b.	Chr. ant. urethritis. No pain, puru- lent discharge.	7	6 wks.	1	Less dis.	No pain, no dis.								
18	E. 975a.	Acute spec. ant. urethritis. Profuse pur. discharge, ardor and chordee.	7	10	0		Same.				Less ardor, less chordee, less dis.				
19	E. 975b.	Subacute spec. ant. urethritis. Pro- fuse purulent discharge, ardor and chordee.	5	30	0	Same.	No chordee, less ardor, less dis.	Same.			Slight ardor, No mucoid dis. pain, mucoid morning drop.				
20	E. 976a.	Chr. ant. urethritis. Morning drop.		9 mos.	0										
21	E. 977a.	Acute spec. ant. urethritis. Profuse purulent dis., ardor and chordee.	5	7	0	No ardor, less chordee, less dis.	Same.	Slight ardor, dis. mucoid.	Less ardor, slight dis.	Same.					
22	E. 981a.	Acute spec. ant. urethritis. Profuse purulent discharge, ardor and chordee.	7	3	0	Less pain, less dis.	No chordee, less ardor, mucopuru- lent dis.			Slight ardor, mucopuru- lent dis.	Dis. mucoid.				
23	E. 987a.	Acute spec. ant. urethritis. Puru- lent discharge, ardor and chordee.	3	4	0		No pain, very slight mu- coid dis.								

TABLE I—Continued.

Case Number.	Hospital Record.	Diagnosis and Symptoms.	Period of Incu- bation.	Number of Days Discharge Has Been Present.	Number of Pre- vious Attacks.	Record of Days After Treatment Was Begun.									
						1	3	4	5	7	13	16			
24	E. 989a.	Acute spec. ant. urethritis. Profuse purulent dis., ardor and chordee.	5	8	0	Less pain, less dis.	No pain, slight dis.								
25	E. 991b.	Acute spec. ant. urethritis. Slight purulent discharge, ardor urine.	7	1	0	Less pain, less dis.	Slight ardor, slight mu- coid dis.		Same.	Same.					
26	E. 993a.	Acute spec. ant. urethritis. Puru- lent discharge, blood, ardor and chordee.	6	3	0	Less pain, less dis.	No pain, no blood, mu- coid dis.		Slight pain, slight dis.						
27	E. 996b.	Chr. ant. urethritis. Profuse puru- lent discharge, ardor urinae.	9	3 mos.	0	No pain, less dis.									
28	E. 998a.	Subacute spec. ant. urethritis. Pro- fuse pur. dis., ardor and chordee.	7	21	0					No pain, no dis.					
29	E. 962a.	Chr. ant. urethritis. Profuse puru- lent discharge, ardor and chordee.	12	7 wks.	0	Less pain, less dis.	No pain, no dis.			Morning drop.					
30	F. 3b.	Acute spec. ant. urethritis. Puru- lent discharge, ardor and chordee.	7	3	2		No pain, dis. mucoid.	Slight mu- coid dis.	Same.						
31	F. 5b.	Acute spec. ant. urethritis. Puru- lent discharge, ardor and cho:dee.	7	2	?	Same.	No pain, mu- co-pur. dis.								

TABLE I—Continued.

Case Number.	Hospital Record.	Diagnosis and Symptoms.	Period of Incubation.	Number of Days Discharge Has Been Present.	Number of Pre-Venereal Attacks.	Record of Days After Treatment Was Begun.						
						1	3	4	5	7	13	16
32	F. 8a.	Subacute spec. urethritis. Purulent discharge, ardor urinae.	4	5 wks.	3	No pain, less dis.						
33	F. 9b.	Acute spec. ant. urethritis. Purulent discharge, blood, ardor and chordee.					Same.	Same.	No pain, no blood, mucoid dis.	Slight ardor, slight chor., mucoid dis.		
34	F. 10a.	Chr. ant. urethritis, stricture. Purulent discharge, ardor.	7	2 mos.	1	No pain, less dis.			No pain, no dis.		Morning drop.	
35	F. 13b.	Acute spec. ant. urethritis. Purulent discharge, ardor urinae.	6	5	0	Less pain, less dis.	No pain, mucopur. dis.					
36	F. 17a.	Acute spec. ant. urethritis. Profuse purulent discharge, ardor and chordee.	9	3	0	No ardor, no chordee, less dis.			Return of pain and slight dis.	Less pain, less dis.		
37	F. 19a.	Acute spec. ant. urethritis. Purulent discharge, ardor urinae.	4	4	2	Less pain, less dis.			Slight pains, slight dis.			
38	F. 21b.	Acute spec. ant. urethritis. Purulent discharge, ardor urinae.	5	1	0	No pain, dis. same.	Same.	No pain, less dis.	No pain, very slight dis.			
39	F. 23b.	Acute spec. ant. urethritis. Purulent discharge, ardor urinae.	7	5	0	Same.	Less pain, thinner dis.	Same.		No pain, mucoid dis.		

TABLE I—Continued.

Case Number.	Hospital Record.	Diagnosis and Symptoms.	Period of Incubation.	Number of Days Since Onset Has Been Present.	Number of Previous Attacks.	Record of Days After Treatment Was Begun.						
						1	3	4	5	7	13	16
40	F. 25b.	Acute non-spec. urethritis. No pain, purulent discharge.	?	5						Morning drop.		No pain, no dis. no shreds
41	F. 28b.	Non-spec. urethritis. No pain, purulent discharge.	?	5		Slight ardor, muco-purulent dis.				No pain, no dis. no chor.		
42	F. 33a.	Acute spec. ant. urethritis. Ardor urinal, purulent discharge.	16?	4	0	Pain same, less dis.		No pain, muco-pur. dis.			No pain, no dis.	
43	F. 40a.	Acute spec. ant. urethritis. Ardor urinal, purulent discharge.	?	3			Same.		Less dis.	No pain, slight dis.	Ardor, blood, more dis.	
44	F. 44b.	Acute spec. ant. urethritis. Purulent discharge, ardor and chordae.	7	14	0			Same.	No pain, muco-pur. dis.	Same.	No pain, morn. drop.	
45	F. 47b.	Chr. ant. urethritis. Purulent discharge, ardor.	3	6 wks.	1	Same.	Same.	Same.	Less pain, less dis.	No pain, slight dis.		
46	F. 53b.	Acute spec. ant. urethritis. Purulent discharge, ardor and chordae.	3	10	1	Same.	Same.	Slight ardor, mucoid dis.		No pain, slight mucoid dis.		
47	F. 57a.	Acute spec. ant. urethritis. Purulent discharge, ardor and chordae.	7	3	0	Same.		Slight pain, mucoid dis.		No pain, lit tie dis.		

TABLE I—Continued.

Case Number.	Hospital Record.	Diagnosis and Symptoms.	Period of Infection.	Number of Days Discharge Has Been Present.	Number of Previous Attacks.	Record of Days After Treatment Was Begun.									
						1	3	4	5	7	13	16			
48	F. 57b.	Acute spec. ant. urethritis. Purulent discharge, ardor and chordee.	5	14	0	Less pain, less dis.		Slight chor., less dis.	Same.						
49	F. 63a.	Non-spec. urethritis, stricture. Purulent discharge, ardor.	?	21	1	Same.	Same.	No pain, mucoid morning drop.							
50	F. 68b.	Acute spec. ant. urethritis. Purulent discharge, ardor.	5	2	0	Less pain, less dis.	No pain, dis. same.	No pain, mucoid dis.		No pain, slight mucoid dis.					
51	F. 69a.	Subacute spec. urethritis. Purulent discharge, ardor urinae.	7	4 wks.	1	No pain, less dis.		No pain, slight dis.	No pain, no dis.						
52	F. 71a.	Acute spec. ant. urethritis. Purulent discharge, ardor and chordee.	2 (?)	3	1				Same.	Very lit. pain, very lit. dis.					
53	F. 71b.	Non-spec. urethritis, stricture.			11				No pain, less dis.			No pain, slight dis.			
54	F. 72a.	Acute spec. ant. urethritis. Purulent discharge, ardor and chordee.	?	14	1		Same.	Injected carbolic acid himself.	Much pain, more dis.	Slight pain, slight dis.		Clouds and strands in 1st glass, 2d clear			
55	F. 73b.	Acute spec. ant. urethritis. Profuse purulent discharge, ardor.	3	14	0			Same.							

TABLE I—Continued.

Case Number.	Hospital Record.	Diagnosis and Symptoms.	Period of Incubation.	Number of Days Discharge Has Been Present.	Number of Previous Attacks.	Record of Days After Treatment Was Begun.							
						1	3	4	5	7	13	16	
56	F. 75a.	Acute spec. ant. urethritis. Profuse purulent discharge, ardor.	?	7	0		No pain, less dis.		No pain, no dis.	Same.		Same.	
57	F. 76a.	Acute spec. ant. urethritis. Purulent discharge, ardor and chor-dee.	?						No pain, no dis.				
58	F. 78a.	Acute spec. ant. urethritis. Profuse purulent discharge, ardor.	3	6	0	No pain, less dis.	No pain, less slight dis.	No pain, no dis.		Slight mu-roid dis.	No pain, no dis., no shreds.		
59	F. 80a.	Subacute spec. ant. urethritis. No pain, profuse purulent discharge.	?	5 wks.		Same.	Less dis.	Dis. nearly stopped.					
60	F. 82a.	Acute spec. ant. urethritis. Some purulent discharge and ardor.	6	2		Same.	Less pain, less dis.			Same.			
61	F. 83a.	Chr. ant. urethritis. Purulent discharge, no pain.	?	2 mos.					No pain, slight dis.	Mucoid dis.	Same.		
62	F. 86a.	Acute spec. ant. urethritis. Purulent discharge, ardor.	2 (?)	3	0	Same.	Less pain, less dis.	Less pain, less dis.	Slight pain, slight dis.				
63	F. 87a.	Acute spec. ant. urethritis. Purulent discharge, ardor urine.	2	14	0	Less pain, less dis.		Less pain, less dis.		Less pain, less dis.	Mucoid dis.		

TABLE I—Continued.

Case Number.	Hospital Record.	Diagnosis and Symptoms.	Period of Incubation.	Number of Days Since Discharge Has Been Present.	Number of Previous Attacks.	Record of Days After Treatment Was Begun.						
						1	3	4	5	7	13	16
64	F. 91a.	Subacute spec. ant. urethritis. Purulent discharge, ardor and chordee.	7	21	0	Less pain, less dis.	Less pain, less Same.			More pain, profuse dis. at night only.		
65	F. 95a.	Chr. ant. urethritis, stricture. Purulent discharge.		11 mos.	1	Same.						
66	F. 95b.	Acute spec. ant. urethritis. Purulent discharge, ardor.	3	8	0				Same.	No pain, less dis.		
67	F. 102a.	Acute spec. ant. urethritis. Purulent discharge, ardor urine.	3	9	1	Same.	Less pain, less dis.	Less pain, less dis.	No pain, mucopur. dis.			
68	F. 101b.	Acute spec. ant. urethritis. Profuse pur. discharge, ardor and chordee.	7	7	0	No pain, dis. same.	No pain, less dis.		No pain, no dis.	No pain, no dis., no chordee, no shreds.		
69	F. 103b.	Acute spec. ant. urethritis. Profuse pur. discharge, ardor and chordee.				Same.	No pain, less dis.		No pain, little same.			
70	F. 115b.	Acute spec. ant. urethritis. Purulent discharge and ardor.	7	1	1			Ardor and chordee, dis. clearer.	No pain, clear dis.	No pain, a little clear dis.		
71	F. 115b.	Chr. ant. urethritis. Profuse purulent discharge, no pain.		4 mos.	1			No pain, no dis., a few shreds in 1st glass.				
72	F. 121a.	Acute non-spec. ant. urethritis. Profuse purulent discharge, no pain.		7	1			A little clear dis.				

TABLE III.—*Analyses of Chronic Cases.*

	Case Number.	Duration of Discharge.	Number of Injections Before Discharge Ceased.	Number of Days Before Discharge Ceased.	Number of Days After Which Discharge Returned.
Cases With Stricture.	13	4 mos.	2	3	14
	16	18 mos.	2	7	19
	34	2 mos.	3	5	9
	65	14 mos.	3	3	
Cases Without Stricture.	3	8 mos.	4	4	
	7	6 weeks.	4	6	
	8	6 mos.	1	2	
	17	6 weeks.	2	3	
	20	9 mos.	1	2	
	27	3 mos.	3	3	
	29	7 weeks.	3	2	
	45	6 weeks.	8	10	
	61	2 mos.	4	7	
	71	4 mos.	2	4	
Average.....			3	4	14

TABLE IV.—*Analyses of Non-Specific Cases.*

	Case Number.	Number of Injections After Which Discharge Stopped.	Number of Days After Which Discharge Stopped.	Number of Injections After Which Patient Was Discharged Cured.	Number of Days After Which Patient Was Discharged Cured.
	40	1	12	4	16
	41	2	12	12	8
	49	4	5		
	53	1	6		
	72	1	5		
Average.....		2	4	3	12

IS DISEASE EVER FUNCTIONAL?

BY PEMBERTON DUDLEY, M.D., PHILADELPHIA, PA.

(Read before the Homœopathic Medical Society of Philadelphia County, April 8, 1897.)

A FEW months ago—I think in October, 1896—there appeared among the “Opinions Expressed” in the *Medical Era*, of Chicago, one attributed to our distinguished colleague, Dr.

J. S. Mitchell, in which he said, "I do not believe there is such a thing as functional disease." I am not aware of the context of this expression of opinion, nor under what circumstances it was written, else it might be possible to attach to it a somewhat different signification from that which, so to speak, appears on its surface. It is not always just to a writer to wrest from his essay or discourse a single sentence and ignore its connection and relation. For this reason I do not wish to be considered as trying to controvert the views held by the very careful and conscientious thinker above named, but rather as presenting some thoughts which, in my view, indicate a relation between the subject and the question of medical treatment.

That modern pathology, and perhaps modern therapeutics also, tend to the encouragement of materialistic views, will scarcely be questioned; nor is the fact at all surprising. About all that recent science has developed respecting the causes of diseases, and respecting the modes in which their production is brought about, is of a distinctly gross, or at least material, character. The microbe and its toxins in their ætiological relations, the chemical and vito-chemical agents employed for their neutralization or destruction, and the researches of the pathological laboratory, restricted as they almost necessarily are to the investigation of tissue changes—all these have an influence in determining the trend of recent thought along materialistic lines and diverting it away from the consideration of the more purely functional, or vital or immaterial features and relations of diseases and injuries. Thus there is likelihood that our conceptions of disease may become one-sided and, therefore, incomplete.

It has sometimes appeared to me that we study health and disease as naturalists, rather than as therapeutists. The definitions of health and of disease which we obtain from the dictionaries, the phenomena of the functions, and especially their classification, as we find them in the text-books, have little if any real value to us as physicians, but are of interest only because they relate to the domain of natural history. Certainly the division of the functions into "vegetative" and "animal" is of almost no value to any physician except the neurologist, if, indeed, it is of any great value to him.

If one would be an "all-round" physician he must study dis-

ease in all its parts and all its relations, and must familiarize himself with all its factors or elements, having first ascertained that it *is* composed of elements. Thus we are led to investigate (1) its bodily susceptibility (which, in some cases, may amount to predisposition); (2) its causes (exciting or maintaining); (3) its modifications of function; (4) its modifications of tissue; (5) its modifications of mechanical relation; (6) its abnormal products, *i.e.*, abnormal in quality, in quantity, or in locality; (7) its tendencies; (8) its sequelæ. These factors are, during some stages of disease, distinctly marked in the mind of the physician, but there come times when the most astute observer finds it impossible to keep them separate or to appreciate all the relations which they sustain one to another. Disease is rarely, if ever, a condition; it is a process; it never is quiescent, properly speaking, but always progressive. Moreover, its factors are constantly changing their relations to each other and to the whole disease. What to-day is a condition resulting from some morbid process, to-morrow may be a predisposition, favoring the establishment of a new morbid process. The morbid products of yesterday are the exciting or maintaining causes of to-day. The congestion of a first stage develops the hypernutrition of the second and the mechanical compression, constriction, dislocation or what-not, of the third; and this, in turn, becomes the determining cause of a whole series of new functional disorders and tissue changes. And so the complication becomes more complicated until, in the effort to distinguish between the cause, the intervening process, and the result, the physician finds himself hopelessly overmastered. We have every reason to suppose that in a disorder persisting for days—perhaps even for hours only—there are to be discovered both functional and structural changes, and in all such conditions each of these factors constitutes both a cause and a result of the other. How futile it is, then, to say *this* disease is essentially functional and *that* essentially structural!

This leads us to ask the question—In what does the essential character or quality of a disease consist? Does it consist in the nature of its exciting cause; or of its maintaining cause; or of its mode of origin; or of its resultant changes—functional, structural or mechanical? Again, does a disease, beginning in a structural change (if we can conceive such a thing), subse-

quently become functional simply by reason of its induction of functional derangement? Does a functional disorder lose its essential quality as soon as tissue changes result? How are we to designate them? I ask the question in all candor, and in all candor confess my inability to answer it.

Disease may begin either by direct change of mechanical relation, involving, of course, impairment of function; or by direct alteration of tissue, also involving modification of function; or by a direct alteration of function itself, without the necessary intervention of a structural or mechanical lesion. In either case, the impairment of function constitutes the obnoxious, perilous result. The body, and each of its parts, are made for use. Health is the condition favoring the highest and best function. Disease which does not impair or threaten function is not disease at all; and men seek the services of a physician because of some real or supposed or anticipated loss of function, usefulness. No definition of health or of disease which fails to make this fact its central point is of the slightest use to the practitioner of medicine or of surgery.

Changes of mechanical relation may result either from the direct application of a mechanical force, or through a change in the structure of a tissue or organ. Structural lesions may arise from the direct application of either a physical or chemical agent, or through change in the function of the part. Thus a change in function is capable of causing structural change directly and mechanical alteration indirectly. Otherwise the latter two changes cannot occur except by the operation of an extrinsic force. But functional disorder is not dependent for its causation upon either tissue change or mechanical alteration. It may, and often does, originate in tissues whose structure shows no evidence of abnormality. This statement accords fully with accepted physiological teachings and is abundantly sustained by clinical observation.

Most, if not all, of the normal vital activities of the body are excited or depressed by non-material agencies. The first effect of these agencies must, therefore, be of a non-chemical and non-mechanical nature; that is to say, given a normal vital organ and a normal stimulation, the resultant will be function, however closely associated with tissue change this functional activity may be. Now it is well known that this functional stimu-

lation or depression may be sufficiently intense to constitute serious disorder and impairment of functional capacity; in other words, disease. We thus perceive that disease may, and in multitudes of instances does, consist of nothing but an undue increase or decrease of the normal functional activity, even though we may admit that in a certain time, longer or shorter, tissue changes must follow as a result.

Again, take what are known as the exciting causes of disease. How often it happens that a mental emotion has brought about sudden, serious, and even fatal disease in persons supposed to be in previous good health, and in whom a post-mortem revealed nothing to contradict the presumption. These facts are surely sufficient to justify the assumption that it is possible for a functional disease to exist in the human body without any tissue complication whatever. How long such a state of things could endure is not a necessary part of the question.

I would not occupy my time or yours in such a discussion as this, but for the relation it sustains to the efficacy of the therapeutic similimum. If I believed that disease is never functional I would never prescribe another homœopathic remedy, simply because I find it impossible to believe that such remedies ever act on anything but disorder of function, or that they ever act directly on structure. They operate solely (to use the language of the late Dr. William Bayes, of London), as specific restorative *stimulants*.

DROPSY FOLLOWING VARICELLA WITHOUT RENAL COMPLICATIONS.—Dr. Von Starck relates the case of a young girl of 2 years who on the eighth day of convalescence from varicella suddenly developed an intense and general anasarca. There was neither headache, nausea, fever nor albumin in the urine, which latter was normal in quantity. The abdominal and thoracic organs were normal. After ten days the dropsy disappeared completely, since when she has been in excellent health. The disease could not have been a nephritis, as there was neither albuminuria nor transitory renal incompetency, of which Janowski has recently reported an example (*Semaine Médicale*, p. 404, 1896), for the urine was wholly normal in quantity and quality, and there were neither headache nor nausea. Therefore, he ascribes the disease to an affection of the cutaneous blood-vessels, due to the virus of varicella. He cites a case reported by Quinke (Kiel), where dropsy followed another eruptive fever, scarlatina, but where the kidneys were normal.—*See Semaine Médicale*, No. 59, 1896.

EDITORIAL.

WM. H. BIGLER, A.M., M.D.

WM. W. VAN BAUN, M.D.

FOREWARNED IS FOREARMED.

As the endeavor is being made here in Pennsylvania to have a new hospital for the insane, when built, put under the control of homœopaths, we know that it will be of interest to our readers to point out some of the consequences which may result from a realization of their wishes.

In Missouri, Governor Stephens, who deserves all honor for his just and manly course, has placed the Fulton Insane Asylum under the control of homœopaths on the following grounds: He did not believe in taxation without representation, and, since the homœopaths were paying from one-third to one-quarter of the taxes, he thought they were entitled to some recognition at his hands. The law recognized them by giving them representation on the State Boards of Health; and in other States, where they had been given control of one or more of the State institutions, their records had in every instance proved excellent and eminently satisfactory to the public. Surely, honest and cogent grounds; but mark the result. All Rome begins to howl, at least all Missouri Rome, as represented by the Central District Medical and Linton District Medical Societies, in a preamble and resolutions which we have not the heart to withhold from our readers.

It would be vain to attempt to gloss over the danger which might threaten our own Executive were he called upon to follow the example of Governor Stephens. We very much fear that he too would be assailed with preambles and resolutions, which, if couched in anything like the fervid terms of those about to be quoted, would forever blast his health and happiness. We wish, therefore, to warn him, and implore him to make some provision to ward off the dire effects of such an onslaught. We would suggest that a few pages of a grammar, a chapter or two from some elements of rhetoric, with a column extracted from any standard dictionary, would prove a harmless but eminently effective prophylactic.

We will now proceed to give the *Resolutions*, but it is with a trembling hand, for we can feel, even at this safe distance, in every word (even when it happens to be the wrong one, or misplaced), all the old-time rancor of the Missouri bowie-knife in the hands of those who should wield only the scalpel:*

WHEREAS, His Excellency, Governor Lon V. Stephens, in the exercise of doubtful and indiscreet power, delegated to him by Legislative authority, has seen fit to depart from the honorable prestige of his worthy predecessors and displace from the control of the State Lunatic Asylum No. 1 those whose influence and ability have made the asylum one of the great charities of the West, and placing it under the control of the homœopathic school of medicine and in the persons of those devoid of experience, illiberal and sectional in science and art,

The rather unusual and quite peculiar use of the word "prestige," and the reference, in this connection, to the *homœopaths* as "illiberal and sectional in science and art," must cover us with confusion.

We, the physicians of the Central District (and Linton District) Medical Society of Missouri—an organization for the advancement of true and genuine science and in behalf of the common afflictions of humanity—express our regret that the highest officer in the State should lend himself to the infatuation of factional science, and to the hallucination of unscientific imagery; wherefore, be it resolved,

We would like here to stop off for refreshments. In that last clause, "the infatuation of factional science" and "the hallucination of unscientific imagery" have led our fancy a weary flight. Our readers will, we know, sympathize with us in our futile endeavor to rise to such heights of "imagery." If the highest officer in the State has lent himself to such things, it is but proper that he should be paid back.

First.—That by this act of the Governor he has forfeited the respect and esteem of all lovers of science and humanity, as well as the impartial citizenship of the State.

We are willing to acknowledge that it may be owing to the weariness from our last flight that we are utterly unable to get that "impartial citizenship" into any proper connection, and we would scorn to countenance any other. It has something to do with the Governor, evidently, and we can only pity him.

* We have made provision for them to be printed in small type; the effects otherwise might be too disastrous. We will furthermore intersperse our own mild remarks, still more to soften the fiery vigor of these Sons of Thor.

Second.—That this procedure on his part indicates a mental condition which fails to appreciate the mission of science of rational medicine.

If the action of these fire-eaters is to be regarded as an illustration “of the mission of science of rational medicine,” we think the Governor is rather to be congratulated on a “mental condition” which fails to appreciate it.

Third.—That he fails to appreciate the condition of that unfortunate element in social life who are deprived of their reasoning power, subjecting them to the management of an inexperienced corps of experimenters, who lurk upon his favor for reward.

Previous to this time we would have hesitated to believe that those “who are deprived of their reasoning power” formed an element in the “social life” in Missouri, but now we doubt it no longer. We are glad that the homœopaths are designated as “experimenters,” for it shows that they are recognized as striving to arrive at the truth, even if they “lurk upon his favor for reward.” That “lurk,” we think, is good—something like Tony Weller’s “circumvented;” it means so much, but what it means, Heaven only knows.

Fourth.—That by the unwarranted innovation upon the helpless occupants of charity of the State he has prostituted his high office for base purposes and unmanly motives.

The zeal of the author is evidently running away with what little knowledge of the English he originally possessed, and is only concerned in hurling polysyllables at the head of the defenceless Governor.

To “innovate the helpless occupants of charity” is surely bad enough, but when he prostitutes his high office “for unmanly motives” his action becomes really too reprehensible for words, and we have nothing to say in his defence.

Fifth—That we, by these proceedings, in the name of science and the interest of our common humanity, do enter our solemn protest against the exercise of power by a bewildered partisan, receiving and holding his office by the suffrage of a free and intelligent people.

It is really too bad to have our tender sensibilities played upon in this ruthless manner. We are now called upon to change our indignation to pity, since the poor Governor is only a “bewildered partisan.” No wonder he is “bewildered;” “receiving and holding his office by the suffrage of a free and intelligent people,” to be attacked by such a series of resolu-

tions is enough to bewilder any one. But let him take heart. By their own admission here, these doctors had no hand in his election to office.

Sixth.—That this Society approves the conduct of Drs. Young and Biggs in refusing to resign their positions except for cause.

At last a ray of common sense breaks through the lurid cloud of professional bigotry. When the question of "bread and butter" enters into competition with the requirements of the CODE, our Drs. Y. and B. are to be commended for making a wise choice.

We hope we may not be accused of wasting too much space upon this subject. Those who are engaged in the arduous work of establishing the rights of Homœopathy before the law and in the State will recognize the prevalence of the same spirit of intolerance even here in the East, in many quarters. The same arguments, the same pretensions, the same claims to a monopoly of science are advanced here, and while they may not assume quite the same fiery pyrotechnic garb so amusingly illustrated in the above concoction, they still have to be met and overcome. Oh, that our own Executive, if occasion requires, may have the courage to imitate Governor Stephens, who, in an interview in reference to this assault, said: "While it is not my intention to make any threats, if the allopathic doctors continue to amuse themselves by passing slanderous resolutions against me because of this action, I will be forced to turn over, instead of one institution to the homœopaths, every institution in the State to them within the next two years."

We have quoted the resolutions *in extenso*, as furnishing also a strong argument for the necessity of a little more thorough preliminary education before undertaking the study of medicine. From persons capable of originating and subscribing to such a document, what could be expected but bigotry and intolerance?

THE AMERICAN INSTITUTE OF HOMŒOPATHY.

THE Buffalo meeting of the American Institute of Homœopathy will be held from Wednesday, June 23, to 30, 1897, at Unity Hall, which is centrally and pleasantly located on Dela-

ware avenue, five minutes' walk from the hotels, and is admirably adapted for the purposes of the Institute.

The hotels of Buffalo are excellent. "The Iroquois" is a high-priced establishment, but there are two or three first-class hotels in the immediate vicinity which offer splendid accommodations and table at \$2.50 per day, and as there are many members and their families who object to hotel bustle and its demoralization in late hours, crowded dining-rooms, etc., Dr. B. J. Maycock, 262 Delaware avenue, Buffalo, N. Y., Chairman of the Sub-Committee of Hotels, will gladly undertake to secure for them superior boarding-quarters in desirable neighborhoods nearby the place of meeting, if they will only take the trouble to write to him in advance stating the character of accommodations wanted and the price per day they desire to pay.

An unusual amount of interest and enthusiasm has been worked up for the Buffalo meeting through the indefatigable efforts of the President, Dr. J. B. Gregg Custis, of Washington, D. C., who has traveled from one end of the United States to the other, and has spared no effort upon his part in bringing together the old delinquents in attendance of the past ten to twenty years and the new applicants for membership, who are already promised by the score, in an united effort to make the meeting of 1897 the banner gathering of the American Institute. All honor is due him for his unselfish sacrifice of time and strength in furthering the interests of the Institute for the past twelve months. He has been faithful in season and out of season.

The Secretary, Dr. Porter, of New York City, has spared no pains in securing an admirably-arranged, scientific programme of a standard second to none, and which is guaranteed to hold the members of the Institute at Buffalo for the entire week.

This is the time of times to become a member of the American Institute, and *THE HAHNEMANNIAN MONTHLY* will furnish any one with a blank application for membership on receipt of request.

Every member of the profession reaps the benefit of an organization like the American Institute, and it is the duty of every member of the Homœopathic profession to strengthen and nourish the Institute in return, for the greater the Institute

the greater the individual benefit. The relationship is reciprocal, even if one's moral obliquity prevents the recognition and acceptance of the duty. The act of uniting oneself with the Institute is a long step in the right direction, but in addition one will find an association, one with another, in these annual meetings to be beneficial, for it deepens the spirit of State and national unity and fraternity, and unwittingly lifts one out of the narrow individual or sectional rut that one gets into who does not mingle with his brethren. These meetings make plain the fact that the homœopathic interest of one city is closely allied to that of another, and the same is true of one State to another, and what helps one helps all, and what helps all helps the individual, and the end is the development of the life and the character of the individual, and with this, comes increased national greatness for Homœopathy.

Do not miss the opportunity to attend the next annual session of the American Institute of Homœopathy, which meets at Buffalo, N. Y., from June 23 to 30, 1897.

CORRECTION.

AN article appearing on page 289 of our May number, entitled "A Review of Fifteen Years' Experience With Typhoid Fever, with Special Reference to Treatment," was in error credited to Charles S. Winters, M.D., Binghamton, N. Y., its author being H. W. Champlin, M.D., Bloomsburg, Pa. Such an error would be impossible if the writer of an article would place his name on his MS., preferably under its heading.

CONTAMINATION OF LIQUID EYE MEDICINES.—Dr. Clough (*Journal of Medicine and Science*, October, 1896), says: "A fruitful source of contamination of liquid eye medicines is the common rubber-bulb dropper. Many a solution over which much care has been exercised to render it stable soon becomes worthless through these little miscreants. Their mischief lies in the fact that many of them—the white variety in particular—are coated with a flour-like film, which becomes detached the instant any fluid touches it and diffuses itself, in an insoluble state, throughout the contents of the bottle in which it is used. Hence, care should be taken that the pharmacist either dispense droppers free from such objection, or else obviate the difficulty by careful cleaning before inserting into the bottle.—*Med. Record*.

GLEANINGS.

NEPHRITIS DEPENDENT ON LATE HEREDITARY SYPHILIS.—Dr. H. Audeoud, from a carefully studied case and reviewing of the literature, concludes that hereditary syphilis may give rise to renal complications, even dating from the time of birth, and that more frequently than is believed, either as gummata, acute parenchymatous or interstitial nephritis or amyloid degeneration.

Such lesions usually are determined during life by symptoms of a nephritis, which may pursue a fatal course with anasarca, albuminuria, anuria, vomiting, uræmia and convulsions. It is of the greatest importance to be able to recognize the ætiology, as specific treatment may cause these symptoms to disappear and bring about a lasting cure.—*La Settimana Medica*, No. 36, 1896. [Dr. Donner, *Ueb. Spæetformen von Angeborenen Syphilis*, 1896, does not mention this localization of hereditary syphilis.—F. H. P.] [Prof. Roberto Campana, *Dei Morbi Sifilitici E Venerei*, Genoa, 1894, p. 163, refers to the statements of Klebs and Beer with regard to the pathology of nephritis hereditaria syphilitica as well as to a case of Bradley (1871), where a cure followed, but he admits that we have no means of distinguishing this variety from the ordinary forms. His lecture on the renal involvements of acquired lues is quite thorough.—F. H. P.]

FATAL HÆMATEMESIS FROM RUPTURE OF A GASTRIC VARIX.—Dr. Lecro-nier Lancaster records the case of a woman of 33 years who, previously healthy, was suddenly seized with a quite profuse hæmatemesis, without previous symptoms of a ulcer of the stomach. Alcoholism and syphilis were excluded, and examination of the blood showed only a simple anæmia. The urine was normal and no hæmorrhages into the retina were to be detected. The hæmorrhage recurred again, a pint being vomited, and a week later after hæmorrhage from the bowels she died. At the necropsy varicose degeneration of a few branches of the gastro-epiploic vein was found in the larger omentum and in the submucous layer of the stomach, with a rupture in one of the submucous veins of the size of a pin-head. No cause for the varicosis could be discovered. He thinks that some cases of hæmatemesis may be due to such a condition.—*Muenchener Medicinische Wochenschrift*, No. 45, 1896. [Osler (*Ibid.*) as causes refers to disease of the blood-vessels, such as miliary aneurisms of the smaller arteries, and occasionally varicose veins. Goodno (*Practice of Medicine*, vol. ii., p. 583), says: "In some cases the veins are found diseased, being degenerated or actually varicose."—F. H. P.]

CONGENITAL CYANOSIS OF RARE ORIGIN.—Prof. Litten (Berlin) recently presented before the Society for Internal Medicine, of Berlin, a boy of 7 years who offered a striking cyanosis of the lips, fingers, etc., together with great swelling of the fingers and toes, great dyspnœa on the slightest exertion, albuminuria, ice-cold skin, disappearance of adipose muscular tissues as well as somnolence. At first sight a congenital heart incompetency was thought of, but the hypertrophy of the right ventricle, the frémissement and the heart mur-

murs of such a state were absent. Nothing abnormal was discovered about the heart. He was inclined to suspect a transposition of both large *blood-vessels*, so that the aorta arises from the right ventricle and the pulmonary artery from the left ventricle. The oxygen necessary for life is transmitted through the bronchial vessels which connect both systems of circulation, otherwise it is difficult to explain how life could be sustained. In the literature there are recorded twenty-four such cases, of which one was diagnosed during life of the patient. In the succeeding discussion Prof. Senator regarded the explanation offered as probably correct, though he stated that possibly the aorta might arise from both ventricles, thus mixing both arterial and venous blood.—*Berliner Klinische Wochenschrift*, No. 45, 1896. [Osler denies that heart murmurs are always present in cases of congenital heart anomalies; instances are on record where with complicated congenital lesions the heart sounds were normal. In the discussion Prof. A. Fraenkel stated the same.—F. H. P.]

ON THE PROGNOSIS OF LUNG DISEASES.—Dr. Dyce Duckworth, in a paper read before the British Medical Association on the prognosis of diseases, states with regard to pneumonia that a one-sided sthenic pneumonitis in a previously healthy and youthful patient nearly always recovers. The prognosis is very unfavorable in drunkards (delirium tremens) and those with emphysema; herpes labialis is usually a good sign and signifies a crisis on the sixth day. Profuse, slightly rust-tinged sputa in lean and even oldish patients is also a favorable sign, as well as profuse sweating and moderate diarrhœa at the time of the crisis. Greenish, brownish and especially dirty orange-colored sputa are prognostically very unfavorable. In apical pneumonia delirium is to be expected in children as well as in adults. Dilatation of the right ventricle, as well as cardiac asthenia, further, the coexistence of Bright's disease, offer an unfavorable prognosis. Pronounced leucocytosis at the time of the fever—polynuclear, neutrophile and finely granular eosinophile cells—is a sign of powerful systemic reaction; absent leucocytosis is in every case a bad sign, as well as slight leucocytosis with continuously high fever. The prognosis from the leucocytosis alone cannot be determined; the temperature must also be kept in view. A parallel course between the two is to be regarded as favorable. The outlook is poor if pneumococci can be cultivated from the blood; also in diabetes, though somewhat less so in gouty subjects. The prognosis is especially gloomy in old and weakened individuals, and with a termination in pulmonary gangrene it is nearly always lethal. In persons with valvular heart affections the course is usually unfavorable. A transition to fibrosis, especially in gouty subjects with club-shaped noses and end-phalanges, point to a chronic course. In broncho-pneumonia the outlook is better in lean patients than in fat ones; this rule holds good for all ages. Malignant growths of the lung cause death in six to eight months.—*Medizinische Neuigkeiten*, No. 42, 1896. [Prof. Prosper Alpinus (Padua), *The Presages of Life and Death in Diseases*, in seven books, vol. i., p. 43, London, 1746, says: "Spits which are black, yellow, green, livid and of different colors are very bad." He cites Hippocrates to the effect that "those who are naturally very corpulent enjoy a shorter life than those who are lean." By a preternatural habit of body violent diseases are produced. "Thus persons of fat and corpulent habits, on account of the small degree of their innate heat, are subject to

several diseases, of which most of them die by reason of the weakness of that heat."—F. H. P.]

DIFFERENTIAL DIAGNOSIS OF ENLARGEMENT OF THE LIVER.—Dr. Charrin (Paris), in a recent lecture on a case of enlarged liver of unknown origin, passed the different causative factors thus in review :

1. A cyst or an abscess would be eliminated by exploratory puncture.
2. Syphilis of the liver would be indicated by the specific history ; besides this disease gives rise either to an atrophy or gummatous changes with subsequent sclerosis, with irregular surface of the organ.
3. In heart diseases with reflux of blood into the supra-hepatic veins one should look for a tricuspid incompetency, which if absent would exclude this condition.
4. In Bright's disease the liver, overburdened by the work of the kidneys, sometimes increases in volume, yet the examination of the urine would decide here.
5. Diabetes also causes an enlargement of this organ ; examine the urine.
6. Chronic peritonitis produces alterations in the liver, but, above all, atrophy ; but the peritonæum should here be painful and nodose, with acites.
7. Malaria may also be suspected, but the spleen is usually here primarily attacked.
8. Leucocythæmia would be accompanied by enlarged lymph-glands, and the volume of the liver is usually enormous, accompanied by characteristic changes in the blood.
9. A fatty liver is also generally of good size, and it may be possible to discover a history of phosphorus or arsenic poisoning.
10. An amyloid liver is usually very voluminous, but the edges are smooth and similar changes are to be found in the spleen and, possibly, in the kidneys, with a history of chronic suppuration, phthisis, chronic diarrhœa or preceding chronic Bright's disease.
11. Poisoning by mercury, phosphorus or arsenic will also give rise to an enlarged liver.
12. Lead poisoning will give rise to changes in the liver, but rather to atrophy. One should look to the patient's previous occupation : type-setter, lead-worker, plumber, etc.
13. Certain forms of cirrhosis determined by parasites higher in the scale than the bacteria, as coccidia, worms, but they are rare and the spleen is usually but little hypertrophic.
14. Alcohol may give rise to changes in the liver, and though a contractile cirrhosis is the rule, it may produce a hypertrophy which remains unchanged or diminishes. It is generally found in persons on the early side of middle life and who have used alcoholic stimulants to excess ; the associated icterus is generally extreme, and there are intermittent attacks of fever. It generally begins before the twentieth year, and its initial period resembles an infection associated with fever ; its duration is long and it presents periods of amelioration.
15. Tuberculosis of the liver is rare, though it is generally observed to follow tuberculous signs in other parts, as the apices or the pleura, as a secondary infection with simultaneous involvement of the spleen.
16. Dyspepsia with gastric and intestinal symptoms is prone to be accom-

panied by large liver—an auto-intoxication from imperfectly digested food-products. Intestinal fermentation is a symptom to be emphasized in the diagnosis.—*Revista Clinica E Terapeutica*, No. 3, 1896.

F. H. PRITCHARD, M.D.

CARDIAC ARHYTHMIA AND OTHER PERTURBATIONS OF HEART-ACTION.—Before the British Homœopathic Society, a paper with the above title was read by Dr. Edward Blake. He observed that the heart is prone to perturbation as regards *rhythm, force* and *rate*.

1. Perversions of *rhythm* were summarily dismissed as possessing no clinical significance.

2. *Force*.—With regard to force, it was shown that prolonged respiration contracts the arteries, whilst forced expiration in man appears to dilate them. These observations seem to flatly contradict the results obtained from animals. An explanation has since been given by Mr. Leonard Hill, whose original researches on the circulation of the blood are so well known. As a result of a very important series of experiments made by him, in conjunction with Drs. Sequeira and Barnard, it has been shown that the apparent dilatation is due to the swelling of the veins which accompany the radial artery, this swelling being caused by thoracic back-pressure. Three large venal comites go with the radial artery, one on either side and one on top. These four vessels completely fill the radial notch. The swelling-out of the veins simulate perfectly an arterial enlargement. The venous dilatation may vitiate all digital, arteriometric and sphygmographic records. These observations excite the gravest suspicions of the radial pulse as a foundation for the erection of any serious superstructure. Some artery should be selected which has no *vena comites*.

3. *Rate*.—*Quickening and Slowing*.—Of these, the latter or bradycardia is by far the more grave and important, although advice is rarely sought for it.

Heart-hurry is of two kinds; tachycardia and palpitation; the difference being that one is conscious of having palpitation, whilst of true tachycardia no one knows that he is the possessor until he is told. The term "tachycardia," introduced by Præbting in 1881 is not very accurate; it should be "polycardia." The point of departure of an attack may be either from the heart itself, from some peripheral distribution of the vagus, or from the sympathetic.

As regards the vagal nucleus, heart-hurry may arise from stimulation of excito-motor fibres or paresis of inhibitory fibres. As a matter of fact, it is nearly always the latter. An inhibitory pulse of 120 means sympathetic irritation. A sustained pulse of 120 to 180 indicates a suspension of bulbar control. Above 180 points to sympathetic disturbance, plus abolished inhibition, with or without excito-motor irritation.

Persistent tachycardia is generally due to neuritis of vagus, especially if it come, endure a certain time, and then go, to return no more. Such cases are seen during pneumonic abscess, the advent and departure of the menses, and in the course of all the zymotics and the great constitutional diseases, and in the so-called "neuroses," many being either auto- or hetero-toxic in character. Even the cases which follow shock, physical or mental, mean an auto-toxis with retained catabolic products.

Heart-hurry, due to vagal neuritis, is of two chief kinds:

- A. Ascending, and
- B. Descending.

Chief forms of the ascending type are :

- 1. Myocarditis.
- 2. Inflammation of the cardiac membranes.
- 3. Aortitis.

Of the descending type :

- 1. Toxis from tea, tobacco, etc.
- 2. Purulent process, pulmonary abscess, pneumonic and tubercular, middle ear suppuration, empyema of antro or of frontal sinus, pyorrhœa alveolaris, gastric and duodenal ulcer, ulcerative colitis, rectal ulceration, pyonephrosis, etc.
- 3. The gastric crises of Grave's disease are a transference of neuritis from superior vagal filaments to the left gastric filaments, and they are probably preceded by an acute gastric dilatation ; for gastric dilation is to the stomach what tachycardia is to the heart. In epilepsy the higher the tension and the older the patient the more favorable the prognosis ; the same holds good of glycosuria ; the very reverse is the case with migraine. True tachycardia, of the sustained type, is unknown in childhood. Its place is taken by chorea, the causes of heart-hurry being identical with the causes of St. Vitus' dance. Chorea, excepting in the shape of that grave disorder, hereditary chorea or Huntington's disease, is rare after the eruption of the second molars.

Anæmia is the commonest cause of tachycardia in women, and rest is essential in these cases ; also the sedulous removal of all infective materials. Then are indicated the dry morning meal and lavage of stomach and intestines. Look out for lead in drinking-water, arsenic in fabrics and in wall-paper, sewer-gas from badly-constructed drains. Attend to decayed teeth, and insist on lung gymnastics. Absolutely forbid tea and alcohol.

In children, though tachycardia is unknown, palpitation is not rare. It is sad to think that terror is the commonest cause. Nurse-maids frighten children by threats in order to hide their own misdeeds or to save themselves trouble. Other causes are naso-pharyngeal growths, displaced and decayed teeth, visual and auditory defects, spinal curvature and close class-rooms, albuminuria, over-exertion and over-excitement.—*Monthly Hom. Review*, February 1, 1897.

THE TREATMENT OF THE SYPHILODERMATA.—In the course of a clinical lecture delivered at the New York School of Clinical Medicine it was stated that careful consideration and trial of the various methods had led to the following conclusion :

- 1. In the primary stage, when only the chancre is present, no general treatment : calomel locally.
- 2. As soon as the secondary period sets in, as shown by the general adenopathy, angina, cephalalgia and eruption, the internal treatment for mild cases should be $\frac{1}{4}$ to $\frac{1}{2}$ of a grain of the proto-iodide of mercury t. d., continued for three months or until the symptoms disappear. In severer cases, with pustular eruptions, severe anginas, persistent headaches, etc., a course of six to ten intra-muscular injections of a ten per cent. calomel. Albolene suspension, 5 to 10 minims at intervals of five to fifteen days, should be employed.
- 3. After completion of the course and cessation of the symptoms, employ tonics, etc., without specific treatment, for three months.

4. Thereupon a second calomel course, as above, plus a small dose (15 grains) of iodide of potassium in milk after meals. This to be given whether later secondary symptoms of the skin and mucosæ appear or not.

5. Second intermission of treatment lasting three to six months, according to the presence or absence of symptoms.

6. In the second year, if tertiary lesions marked by deeper and more localized ulcerations are present, give the iodide of potassium in increasing doses (60 to 600 grains daily, as may be necessary). Combine with it occasional courses of calomel injections. If no lesions appear, give a mild course of both.

The best local treatment of the syphilodermata is with the mercurial plaster-mull.—*Medical Argus*.

F. MORTIMER LAWRENCE, M.D.

APOMORPHINE.—The following is an abstract of an article in the *Charlotte Medical Journal* for April, 1897. Apomorphia was discovered in 1868. Its manufacture consists in the action of HCl on morphia in sealed tubes at a high temperature. The base can be obtained from the resulting hydrochlorate of morphia by dissolving in water, adding excess of bicarbonate of soda, and extracting by means of ether or chloroform. In short, apomorphine is morphia minus one atom of water. It is soluble in hot or cold water, also in alcohol. In powder it is snow white. The watery solution is at first colorless but soon turns almost black. Its action is more rapid and certain than any other emetic drugs, considering them to be tartar emetic, ipecac, and sulphate of mercury. One-tenth grain of the drug given hypodermically will produce the following symptoms: In scarcely one-half minute fullness of the head begins to develop; the pulse is quickened and increased in volume; the pupils slowly dilate; face is flushed; perspiration soon appears, the respirations more frequent, the heart-beats become more rapid, and before two minutes elapse emesis is produced. Then comes the reaction. Relaxation of everything, lasting about an hour. The eyes are sunken, the pupils widely dilated, the face is pallid and drawn. Muscular relaxation. Yawning, followed by sleep, and upon awakening all effects have passed away. Physiologically it increases the frequency of the action of the heart, due to the lowering of the arterial pressure. The superficial arteries become more prominent and hard to the touch; especially is this the case with the temporal. The qualities which recommend apomorphine are as follows: 1. Rapidity of action. 2. Absence of danger from overdoses. 3. Lightness of secondary effect. 4. Easy manner of introduction. 5. The shortness of period of emesis. The average time for its action is nine minutes. The English preparation is the purest, while that of the German has a trace of morphia.

The dosage for an adult is $\frac{1}{5}$ to $\frac{1}{15}$ grain. For a child 18 months, $\frac{1}{55}$ grain; 2 years, $\frac{1}{10}$ grain; 3 years, $\frac{1}{35}$ grain; 5 years, $\frac{1}{30}$ grain; 8 years, $\frac{1}{25}$ grain.

WOODWARD D. CARTER, M.D.

TO CONVERT FAHRENHEIT TO CENTIGRADE DEGREES.—A French publication gives the following simple rule for converting Fahrenheit to Centigrade degrees, which, however, does not apply so well to the reverse calculation: Subtract 32 degrees and divide by 2; then add to this one-tenth of itself, and, if further accuracy is desired, one-hundredth more. For instance, if it is

required to find the number of Centigrade degrees corresponding to 72 degrees Fahrenheit, subtract 32 and divide by 2, giving 20; adding one-tenth more gives 22, and, for greater accuracy, another one-hundredth gives 22.2.

A CASE OF PYÆMIA OF INTERNAL ORIGIN.—Dr. J. A. Gvozdzinski (Kieff, Russia), observed the case of a private soldier who was transported to the General Military Hospital of Kieff, May 29th, fully conscious and complaining of pains in his joints. The day before he had had a rigor which was followed by pains in the head and limbs, as well as dark-red spots on the arms and chest. Until thus stricken down he had been well and strong. His general state of nutrition was good. May 30th.—A typhoid state supervened, with numerous livid spots on the trunk and extremities, of the size of a millet-seed to that of the palm of one's hand. The articulations were painful on movement. The internal organs presented nothing abnormal. Temperature, 38–39° C. June 1st.—His pulse somewhat uncountable and arhythmic; corneæ turbid; sphacelus of the fingers and feet set in; in an entirely unconscious condition. June 27th.—Rupture of the corneæ; fibrinous deposits on the crystalline lenses; the action of the heart weaker; death took place during the night. Bacteriological examination of the blood revealed the presence of the staphylococcus albus which was regarded as the causative factor of the disease. The necropsy demonstrated the presence of an ulcerating laceration of the lower end of the œsophagus, which probably was the point of entrance of the infectious process.—*Iz Obshtchestva Kievskich Vratshai*; Zasedanie 5 Oktjabrja; *Vrsh* No. 47, 1896.—Drs. Jaworski and Nencki—*Przegląd Chirurgiczny*, 1896, abstr. in the HAHNEMANNIAN MONTHLY, June, 1896—report an interesting case where an anthrax developed, with fatal results, under the clinical picture of purpura hæmorrhagica. Drs. Arnstein and Troczewski—*Gazeta Lekarska*, 1895—abstr. in HAHNEMANNIAN MONTHLY, May, 1895—record a case of fatal infection through a septic wound of the foot, where there also was a picture of purpura hæmorrhagica.

A CASE OF CONGENITAL CYANOSIS FROM STENOSIS OF THE PULMONARY ARTERY AND PERSISTENCE OF THE FORAMEN BOTALLI.—Prof. Litten (Berlin) recently presented before the Medical Society of Berlin a young woman of twenty-two years who suffered from very pronounced cyanosis, with dyspnoea, palpitation and nausea. The pulmonary artery was found on auscultation to present a thrill and a systolic murmur of a musical character; the right ventricle was also considerably hypertrophied. Congenital stenosis of the pulmonary with persistence of the foramen Botalli was diagnosed. This stenosis was probably slight, as the radial pulse was strong and full, and the patient enjoyed fair health. In this congenital condition it is rare that the foramen closes. The cyanosis he attributed to the dilatation of the right auricle.—*La Semaine Médicale*, No. 63, 1896. At the same meeting Dr. Oestreich laid before the members a pathological specimen of congenital constriction of the pulmonary artery, which was taken from a subject of forty-seven years, who for a long time had not suffered from circulatory disturbances. Dr. Litten also referred to a necropsy which he and Virchow had done, where the trunk and the two branches of the pulmonary artery were filled with echinococci, the calibre of the vessels being reduced to that of a thread, yet the patient did not suffer from any disturbance of the circulation.

A CASE OF MULTIPLE IDIOPATHIC PIGMENTED (HEMORRHAGIC) SARCOMA OF THE SKIN.—Dr. M. V. Tuzzeff (Charkoff, Russia), in a paper read before the Society of Medicine and Hygiene of Charkoff, related the history of a case of this interesting disease. X., in March, 1893, was obliged to stand for several hours in cold water until his limbs were entirely benumbed with cold. At first he felt a general malaise, which was succeeded by swelling of the soles of both feet. Somewhat later there appeared, instead of this swelling, purplish-red spots, which were replaced by dark-bluish and livid nodes. These latter coalesced and grew larger, finally surrounding the ankle-joint as separate verrucose tumors. The epidermis was thickened, with a pale and bluish-red surface. On the swollen soles of the feet there were bluish-colored plaques, becoming paler on pressure, interspersed with darkish-blue nodes. They varied in size from that of a bean to a good-sized hazel-nut, but these latter less in number. At the beginning of winter they also spread up on the legs, which were swollen and thickened. On the thighs and the upper extremities there also were nodes of the size of a pea. On the dorsum of the left hand there was a plaque of dark-red color five cms. in diameter. His penis also presented four small nodules. The middle of his left ear was thickened, of a dark-livid color, and contained three nodules. The right eyelid also was swollen. For a year the patient has been bedridden. His spine in the mid-dorsal region was sensitive to pressure; the sixth and seventh intercostal spaces in the subscapular region were also tender on pressure. Senses of location, of temperature as well as sensibility, were normal. Sensitiveness to pain was considerably increased. The reflexes were also augmented, especially the testicular. The patient was extremely nervous, suffering from headache and palpitation of the heart. There was a coexisting mitral incompetency. The blood-count was 4,800,000. He had abused spirituous liquors previously. During his childhood he said that he had been afflicted with a similar disease (?), which had dragged along for four years and then wholly disappeared, without any sequelæ. A diagnosis of multiple, pigmented sarcoma of the skin (Kaposi) was made. The reporter was inclined to regard the disease as of nervous origin on account of the nervous diathesis of the patient and the regular distribution of the nodes, etc., in fact, a *paralytic angio-neurosis*.—*Iz Obshtchestva Nautchnoi Meditsiny i Gigieny pri Charkoffskom Universitetje*; *Vratch* No. 47, 1896.

BILIARY CIRRHOSIS OF THE LIVER FROM IMPACTED GALL-STONE.—Dr. Harbitz (Christiania) recently presented before the Christiania Medical Society a specimen derived from a woman of sixty-three years, who suffered from biliary cirrhosis, due to an impacted gall-stone. For three years she had been a victim of gall-stone colic, from time to time associated with icterus. During the past eighteen months she had been continuously icteric, dying cholæmic after refusing operative intervention. The necropsy brought forth an enlarged liver, which was finely granular and of a firm consistence. On section, the interacinose connective tissue was noted to be quite increased, including small islets of yellowish colored acini. The gall-passages were decidedly dilated, the hepatic and cystic ducts, as well as the gall-bladder especially, which contained five gall-stones. Near the duodenal end of the ductus choledochus there were two cylindrical stones five cms. in length. Microscopically, there was great increase of the interacinose connective tissue,

no increase of the connective tissue in the peripheral portions of the acini, but decided proliferation of the smaller gall-passages, with round-celled infiltration. The liver-cells were of a normal color, and did not appear to be degenerated. Therefore, a diagnosis of hypertrophic, biliary cirrhosis was made.—*Brev fra Norge; Hospitalstidende* No. 49, 1896.

SARCOMA OF THE KIDNEY.—Dr. F. Ramm (Tromsø, Norway) recently observed a child of two years who for a year had had an enlarged abdomen, and at the same time had been obliged to urinate quite frequently. Some six months before the right side had been noticed to be more prominent. The child began to emaciate, and, when seen, it was pale, with sunken cheeks, an expression of suffering, and a very weak pulse. The distended abdomen, with a prominent network of veins, protruded especially on the right side, where an area of dullness extended from the lower border of the liver almost to the symphysis. A tumor, which was lobulated, immobile, distended, elastic and smooth, could be palpated. A crucial incision brought to view a tumor of the size of a child's head, situated within and below the capsule of the kidney, and surrounding the whole organ. Microscopically, it was seen to be a round-celled sarcoma. About three weeks later the child left the hospital in good health.—*Norsk Magazin for Lægevidenskaben*, No. 10, 1896.

TWO ABSCESSSES OF THE WHITE SUBSTANCE OF THE BRAIN DURING THE COURSE OF PULMONARY TUBERCULOSIS, WITH JACKSONIAN EPILEPSY.—Dr. A. Pulawski (Poland) records the instructive case of a tuberculous male, whose sputa contained, besides the bacillus of tuberculosis, a number of other microbes, and who was seized one night with numbness of his left lower extremity. The next morning this was succeeded by convulsions of the left half of the body, fever, complete paralysis of the left lower limb, paresis of the left upper extremity, a slight paralysis of the lower branches of the left facial nerve, headache, and vomiting. This state gradually grew worse. Retention of urine and feces supervened, ptosis of the right eyelid followed, paresis of the muscles of the eye, and finally the patient died on the tenth day. The necropsy demonstrated the existence of a purulent meningitis of the base of the brain and of two abscesses, placed one above the other, in the white substance of the right hemisphere. One of these, of the size of an almond, was situated immediately beneath the cortex; the other, of the volume of a hazel-nut, was filled with fetid and greenish pus. No tubercle-bacilli could be detected in this pus.—*Przegląd Chirurgiczny*, tom. iii., zeszyt 2, 1896. Osler—*Practice of Medicine*, p. 904—lays especial stress on the connection of suppurative processes of abscess of the brain with *suppurative processes of the lungs*. "Localized bone-disease, suppuration in the liver, but, above all, certain inflammations in the lungs (particularly gangrene, bronchiectasis and fetid bronchitis) are liable to be followed by abscess." Bartlett—*Goodno's Practice of Medicine*, p. 669, vol. i.—also dwells on this point.

F. H. PRITCHARD, M.D.

APPENDICITIS.—Syms classifies appendicitis under two heads: First, benign; second, malignant. These may subdivided thus:

BENIGN.

Acute, Primary.

1. Simple catarrh, with or without concretion.

2. Parietal, involving all the coats.
3. Parietal, with local adhesive peritonitis.

CHRONIC.

1. Recurrent.
2. Relapsing, with concretion, stenosis, or foreign body.

MALIGNANT.

1. Acute suppurative, with local fibrino-purulent peritonitis by extension or perforation.

2. Acute suppurative, with progressive fibrino-purulent peritonitis by extension or perforation.

3. Sub-acute gangrenous, with localized fibrino-purulent peritonitis.

4. Suppurative, with retro-cæcal cellulitis.

5. Gangrenous, with retro-cæcal cellulitis.

Fulminating: 1. Acute purulent, with perforation and general peritonitis, or peritoneal sepsis. 2. Acute gangrenous, with perforation, general peritonitis, or peritoneal sepsis.

Any benign appendicitis may become a case of any of the forms of malignant appendicitis.

This is more frequently demonstrated in the recurrent and relapsing forms. The question is really one of degree of severity rather than one of variety of diseased condition.

It is Syms' rule to insist upon operation in any one of the varieties which he has classed as malignant, and to advise operation in the recurrent and the relapsing cases unless there is some special condition of the patient which would contraindicate an operation on general principles.

In these cases he always operates between the attacks, and long enough after an attack to avoid operating through an infected and inflamed area.

Every acute case of mild severity may be treated expectantly with the hope of checking the disease before it becomes one of malignant type.

Many cases of mild appendicitis are attended by very severe symptoms, while many of the most grave cases gave rise to very slight symptoms. This latter is particularly true of the most malignant type, namely, the fulminating variety.

Concerning the treatment of appendicitis the cases may be classed in three groups:

First. Those in which operation is unnecessary, and in which expectant treatment should succeed.

Second. Those in which operation is advisable and justifiable, but in which delay may not do harm.

Third. Those in which operation is imperative, and is the only safe method of treatment.

The first group is limited to the cases of primary catarrhal and primary parietal appendicitis without suppuration and without gangrene.

The second group embraces all cases of recurrent and relapsing appendicitis.

The third group embraces all the forms of appendicitis which have been classed as malignant; that is, all cases of suppurative or gangrenous appendicitis, with peri-appendicular abscess and the fulminating type.

Before leaving the first group, the proper method of expectant treatment may be briefly stated :

Put the patient to bed and keep him there. Apply over the whole of the right iliac region a soap poultice consisting of a thick layer of green soap spread on a single thickness of muslin or sheet-lint.

Over this apply a broad ice-bag—better still, an ice-coil.

Relieve the bowels by a soap and water enema.

Keep the stomach at rest while vomiting exists.

Restrict the patient to milk if he can take it; if not, give him clear broth.

Note the temperature, pulse, and respiration every four hours.

Give no drugs, except opium or morphine in case of abdominal shock from rupture of appendix or abscess.—*New York Medical Journal*.

SURGICAL HINTS.—Among other aseptic measures of importance, a careful disinfection of the anæsthetizing apparatus deserves to be considered. The rubber mouth-pieces, so frequently used, become spoiled with spittle, with the impurities contained in the patient's exhalations, and even with vomited matter. It is believed that many a case of post-operated pneumonia has had its origin in neglect of cleanliness in this respect.

In cases of shock, resulting from accidental or surgical traumatism, it is important to remember that over-stimulation is often productive of bad results. Bryant said that, "To do enough to maintain life is essential; to do more is dangerous." Excessive stimulation is very apt to cause severe secondary hæmorrhage, and the production of excessive heart action is harmful in most inflammatory conditions.

An ointment composed of 10 per cent. balsam of Peru in vaseline, to which enough cocaine hydrochlorate to make 4 per cent. has been added, makes an excellent and most soothing dressing for painful granulating wounds.

Never operate for varicocele on both sides at one sitting. The accident of atrophy of both testes has been known to follow.

The occurrence of infection in a wound where primary union was looked for is almost invariably indicated by elevation of temperature. In severe and dangerous infection, such as one meets when virulent streptococci are present, the temperature is high; there may be chill, and there is usually pain. Where the infection is of a mild type, however, a slight constant elevation may be for many days the only sign, and must always be regarded with suspicion, no matter how dry and clean the wound union may seem. Remember that the normal human temperature taken by rectum in the morning is below ninety-nine degrees Fahrenheit.—*International Journal of Surgery*.

THE TREATMENT OF VARICOSE VEINS.—Dr. O'Connor, after ten years' operative experience, has come to the conclusion that nothing short of total extirpation of the diseased portion of veins merits the term radical.

In numerous instances he performed the orthodox operation—*i.e.*, removal of many bits; and regrets to say that in a considerable percentage the cure has by no means been permanent. "The radical treatment has for its object the complete obliteration of the veins."

The limb having been shaved and disinfected from Poupart's ligament to the ankle, a two-inch incision is made over the saphenous opening, and the

internal saphenous trunk is doubly ligated and divided: if no varicosity is present above the knee the wound is closed and dressed at once with iodoform gauze. If the femoral portion is affected, after ligation at saphenous opening the vein is dissected up and its tributary seized with pressure-forceps and ligated. In nearly all cases, if varices are present above knee, there are also some below, consequently the incision is prolonged downward directly over the vessel until the lowest limit of the disease is reached; the vein is then tied and divided below. In some cases an eighteen- or twenty-inch incision is necessary.

If the disease does not extend above the knee, after occluding the saphenous trunk as described above, an incision is made over the affected portion, a ligature is applied above and below, and the whole mass removed by dissection. It is surprising how easily and rapidly the latter manœuvre may be carried out. Of course, all branches are caught up with pressure-forceps, and when the main channel is removed, they are ligated. As frequently the external saphenous vein is also affected, its varicose portion is dealt with in a similar manner. To any one unaccustomed to a ten- or twenty-inch incision this plan may appear formidable, yet if the vessel is ligatured above and below the varicose area, there is not the slightest danger of emboli or pyæmia; and as for hæmorrhage, it is so trivial that it does not deserve mention. In a recent severe case O'Connor removed twenty-six inches of the internal saphenous, and certainly the blood lost did not exceed two ounces. He has also employed this method in removing large thrombosed veins occurring in the first few months of pregnancy; in this class, above all others, it is particularly necessary, before manipulating the diseased portion, to occlude the main vein well above the seat of disease, so that if thrombi are dislodged they cannot pass into the general circulation.

The time occupied in executing this method certainly does not exceed that of any of the nibbling processes. As to primary union, O'Connor finds long wounds healed just as kindly as do the short ones, and with ordinary surgical cleanliness there is nothing to be feared. The insertion of a strand of iodoform gauze as a drain to every four inches of wound is a useful precaution, for it does away with the risk of any blood collections. No bad results have so far followed this method.—*Annals of Surgery*.

HERBERT L. NORTHROP, M.D.

THE USE OF FORMALIN IN THE TREATMENT OF SUPPURATING CAVITIES.

(Stouffar.)—He reports very favorably on the excellent results of copious and repeated irrigation of suppurating cavities with a solution of formalin. It causes no irritation or intoxication and is a complete disinfectant. In these cases, neither sublimate nor carbolic acid can be used without fear of intoxication, and boracic acid is hardly a sufficient disinfectant. He prepares the solution of formalin in the following manner: A tablespoonful of a 40 per cent. solution of formalin, as found in the shops, is mixed with one litre of boiling water, and from this solution a tablespoonful to a litre of water is used for the irrigation.

Jacobs uses it exclusively for the disinfection of the hands and of the field of operation. It has been of the greatest service in suppurating cavities. He also uses it for the instruments and suture material after they have been boiled in glycerine. Suppurating sutures in the abdominal wall after laparotomy

have been injected with a solution of formalin and the suppuration has ceased immediately.

Guillaume (Brussels), has recently treated a catarrh of the bladder, of a blenorrhoeic nature with irrigations of hypermanganate of potash without success. A single irrigation with formalin caused the cloudiness of the urine to disappear in twenty-four hours and to cure the catarrh.

Van Hassel has found formalin exceedingly beneficial in irrigation of the uterine cavity after curetting, though it could not be endured as a vaginal injection.—*Centralblatt für Gynäkologie*, No. 7, p. 202, 1897.

THE TREATMENT OF FACE PRESENTATION BY MANUAL REPOSITION INTO OCCIPITAL POSITION—R. KNOOR (Berlin).—He reports twelve cases, and three others which were not operated upon by himself. He recommends Thorn's method as the best, as it does not require assistance. The operator accomplishes by it the best of Baudelocque's and Schatz's methods (drawing down the occiput or pressing up the face with external pressure on the breast). He considers drawing down the occiput with the internal hand more certain than pressing up the face. The operation should be performed under ether. The prophylactic treatment of all face positions in this manner is to be condemned, as the operation is only indicated when difficulties arise in the course of labor. It is also contra-indicated in the higher degrees of pelvic contraction.—*Centralblatt für Gynäkologie*, No. 6, p. 156, 1897.

THE INFLUENCE OF LEAD-POISONING ON THE COURSE OF PREGNANCY—J. BALLAND (Paris).—He poisoned ten pregnant rabbits by subcutaneous injections of the acetate of lead and by feeding carbonate of lead; only two of these had labor at full term and viable young. In the statistics of Baudelocque's clinic in Paris there were thirty pregnant women in the last six years who showed symptoms of lead-poisoning. They had altogether eighty-two pregnancies with only twenty-four labors at the normal term of pregnancy; the remainder ended in premature labor or abortion. These women were employed as compositors, with painters, in a jewelry factory, or in the manufacture of artificial flowers. On further inquiry he found that pregnant women employed in these occupations, either aborted or gave birth prematurely to a sick child. He also fed a nursing dog with lead, and from this time on the pups began to suffer and emaciate. Lead-poisoning is, therefore, a contra-indication to nursing.—*Ibid.*

THE PREPARATION OF CATGUT BY BOILING IN JUNIPER OIL FROM THE WOOD—BRÖSE (Berlin).—The writer has not been satisfied with any of the methods for sterilizing catgut, partly on account of the many details and partly because the catgut obtained has not been durable, and has replaced alcohol, which boils at 78° centigrade, by juniper oil, which boils at 157° centigrade. He warns against warming the oil directly over the flame, as it easily takes fire. An oil bath, paraffine bath, or a retort, should be used. He also has experimented with warming it in a water-bath, as it was doubtful whether the catgut would retain its strength at a temperature of 157°. If the catgut is placed in cold juniper oil from the wood, put in a water-bath, and carefully covered so no steam can touch it, and allowed to remain in the water-bath for half an hour from the time the water begins to boil, it is absolutely sterile, according to my bacteriological examinations. The oil of juniper from the

wood consists chiefly of a mixture of terpene, carburetted hydrogen gas with a formula $C_{10}H_{16}$, which takes up oxygen from the air and assumes the character of ozone. The disinfecting action of the oil may depend on this peculiarity. I have, therefore, experimented with oil of turpentine, which contains terpene as the most important constituent. I must allow that a harder and tougher catgut is obtained with oil of turpentine than with oil of juniper; the anthrax spores also die in oil of turpentine, which has been known for some time as an excellent germicide. Besides sterilization, the fat is completely removed from the catgut in these ætherical oils, besides being freed, probably, from the residue of water from the heating. The catgut can be immediately used for operation from the etheric oil after sterilization, but the hands of the operator are attacked by either oil, and I therefore place the catgut, before using, in a one to one thousand solution of sublimate in alcohol.—*Zeitschrift für Geburtshülfe und Gynäkologie*, Bd. xxxv., H. I., 1897. P. 486.

THE ÆTIOLOGY OF CANCER—Bäcker.—The writer concludes as follows: First—

1. There is no basis for an explanation for the direct causes of cancer; there is no ground for assuming that cancer may be caused by a specific synco-organism.

2. The clinical causes which, to a certain extent, prepare the soil form a group of endometritises, the beginning of which can be traced in most cases to the puerperal period, such as

a. Carcinoma is much more common in those who have borne children than in those who have not. The disease does not develop immediately after labor but after several years.

b. Not every chronic endometritis, but rather the puerperal group, favor the development of carcinoma, as shown by the negative evidence that cancer is seldom seen in sterile women and those suffering from gonorrhœa.

c. That we find in almost every case of uterine carcinoma the picture of chronic catarrh.

d. The disease is much more rare in single women than in married women and in widows.

e. It is emphasized in every text-book, that cancer is more rare in the well-to-do than among the poor classes, which is also explained from the fact that the poor classes pay little or no attention to leucorrhœa.

f. My opinion is confirmed by the experience of others. Tillmann's (*Allgem. Chir. Path. und Therapie*, S. 623), that the effect of previous inflammation is very important in the development of cancer, i.e., a previous mastitis favors the development of cancer of the breast, and an ulcer of the stomach may be the cause of the development of cancer of the stomach.

Our experience, as we have said, goes to show that endometritis is the primary cause. If carcinoma were the primary process, why should it not equally effect nulliparæ as well as multiparæ? Why does carcinoma first appear many years after labor? Why do we often meet marked cases of endometritis where cancer cannot as yet be recognized? There are many examples in which we have seen with absolute certainty that the catarrh preceded the cancer. From a clinical standpoint the ætiology of cancer of the uterus is not so obscure as the text-books assume, but great importance must

be given to catarrhal affections for its origin.—*Archiv. für Gynäkologie.* Bd. liii., H. I. P. 59, 1897.

The translator believes that he who is familiar with the writings of Dr. T. A. Emmet on the origin of cancer in relation to laceration of the cervix, will read between the lines of the above extract.

THE RESULTS OF PALLIATIVE TREATMENT OF CARCINOMA OF THE CERVIX (*Klotz*).—Total extirpation of the uterus for cancer has its limitations. Such is the case when the adnexa are attacked, when the cervix has already disappeared or crumbles on being seized with the bullet forceps. After curetting in the latter cases there is a large cone-shaped wound formed by the walls of the vagina and cervix, which opens into the body of the uterus. Among the various palliative means for limiting hæmorrhage and decomposition he prefers the cautery. He has seen complete closure of the vaginal vault in some cases follow its thorough use. He now employs it in the following manner: He burns out the cancer in several sittings of a quarter of an hour. In the first sitting he cauterizes thoroughly only the cavity of the uterus with a long burner. In ten days the wall of the cervix and the uterus is treated with the ball burner, and more with the glow heat than with the white heat. From the third to the fifth sitting the wall of the cervix and the vaginal wall are treated in a like manner. In two months there may be only a granulating cone, which in four months has been completely cicatrized.

He treated by this method 6 cases selected from 25 which were no longer operable, but, what is most important, obtained complete cicatrization in all 6 cases without injury to adjoining structures. All 6 cases have remained absolutely well without hæmorrhage or discharge. Their ages vary from 39 to 54 years. There is no recurrence to be found after 4, 4, 3, 2, 1, 1½ years respectively. They are still under observation and consider themselves cured.

As this method has never been followed with bad results, and an absolutely hopeless case has remained free from recurrence for four years, he believes there is reason to strongly recommend it.

Leopold, in such cases where the carcinomatous uterus is not movable, eureses all the carcinomatous places within reach with large and small spoons, and chars thoroughly such places afterward with Paquelin's burner. At intervals of from one to three months he treats the cauterized crater of the carcinoma repeatedly with concentrated carbolic acid. A little wad of cotton is taken in a pair of forceps and dipped lightly in pure carbolic acid so as to take up a small drop. The crater and all new growths are cauterized by it. This method has been practised by him for some years with excellent satisfaction. Hæmorrhage and suppuration are decidedly limited, and the lot of the unfortunate materially relieved.—*Ibid.*

GEORGE R. SOUTHWICK, M.D.

A METHOD OF UNTYING THE KNOTS OF SILK LIGATURES.—Dr. Herman Grad, New York, has devised a method of removing subcutaneous silk ligatures by the use of traction-strings. The procedure is as follows: The first loop of the ligature is made to include a traction-string of suitable length. The ends of the string are then tied together, the number of knots used corresponding to the number of the loop. A second traction-string is then slipped over the ligature, and the knot tied, the ends of traction-string No. 2

being tied together. If a third knot is used in the ligature a third traction-string is required. Each loop is made to contain a traction-string with a knot on the end to correspond with the number of the loop which it controls. One end of the ligature is now cut off, and the long end, together with the traction-strings, are tied together with a piece of fine silk and brought out of the wound. When the surgeon wishes to remove the ligature, he cuts the silk which holds the bundle together, selects the traction-string which controls the last loop, and makes gentle traction first upon one end and then the other, until the knot gives way. The process is repeated upon the other knots until they are all untied. The ligature is finally withdrawn by means of traction upon its long end.—*American Gynec. and Obstet. Journal*.

WHEN SHALL WE USE FORCEPS?—Dr. W. E. Park, in an article read before the Philadelphia Obstetrical Society, answers the above query by suggesting a set of rules which may be suitable for a working basis:

1. The indication for the use of the forceps rarely or never arises during the first stage of labor, before the membranes have been ruptured.

2. It may be necessary to employ the forceps during the first stage, when the waters have escaped, on account of the increasing exhaustion of mother or child.

3. It is proper to apply the forceps during the first stage of labor for accidents, whenever they may arise, notably in certain cases of convulsions, placenta præviæ, and prolapse of the cord.

4. In the second stage it is proper to apply the forceps one-half hour after the head ceases to advance, when there is no disproportion between the passage and passenger.

5. When, however, there is a tight fit between the child and the birth-canal, the use of forceps may be delayed. This delay should rarely exceed two hours after the head ceases to advance.

6. If the head is engaged and neither advances with a pain nor recedes after the pain, the forceps should be applied promptly.—*American Gynec. and Obstet. Journal*, February, 1897.

WOODWARD D. CARTER, M.D.

PEROXIDE OF HYDROGEN IN DISEASES OF THE NOSE, THROAT AND EAR.—Dr. Scheppigule, of New Orleans, in an address before the Western Society of Eye, Ear and Throat Surgeons, says: "In diseases of the nose, peroxide of hydrogen is an important therapeutic agent. In ozæna a wash of a 25 per cent. solution is useful; or, after washing the nostrils with an alkaline or the normal physiological salt solution, the hydrogen peroxide, pure or mixed with an equal quantity of glycerin, may be applied locally by means of an atomizer or applicator with cotton, to remove or destroy any scabs or secretion which may be left. In this way the nostrils can be kept clean, and the offensive odor, which is one of the most unpleasant features of this disease, may be prevented. In purulent rhinitis a 5 per cent. solution, to which an alkali has been added, is useful. It is also said to be serviceable in controlling nasal and pharyngeal hæmorrhage.

"In membranous rhinitis, whether due to the Klebs-Loeffler bacillus or to micrococci, the spraying of the nostrils with a 20 to 50 per cent. solution is indicated, and has given me excellent results. My experience in diphtheritic rhinitis with this agent has been so satisfactory that I have not deemed it nec-

essary to use the antitoxin in these cases, as this does not seem to prevent the post-diphtheritic paralysis, which would be the only reason for my using it in diphtheritic rhinitis.

"In specific necrosis in the nostrils, peroxide of hydrogen is an important agent, not only for its disinfecting properties, but also for controlling the horrible odor that is present in these cases. In diseases of the accessory sinuses of the nose, peroxide of hydrogen is so beneficial that I use it in all cases, whether of a maxillary, frontal, ethmoidal or sphenoidal sinus. In my opinion, it cleans and disinfests the infractuositities of these cavities more effectively than any agent that we have.

"In diseases of the throat, peroxide of hydrogen is used in follicular and other forms of tonsillitis and in specific affections, and is a sheet anchor in diphtheritic processes in this region. Long before the introduction of antitoxin, I have had excellent results from hydrogen peroxide in diphtheria, and even since the use of this serum I never fail to use the peroxide as a valuable adjunct, and I believe it to have an important bearing on the results obtained. It attacks the membrane, disinfests the parts, and has no injurious effects when swallowed, which is more than can be said of many other antiseptics used for this purpose. In a recent case of laryngeal diphtheria, to which I was called in consultation, the stridor and dyspnoea were so marked that I was compelled at once to introduce an intubation tube. The tube, however, was repeatedly coughed out, and I then made use of a procedure which I had found beneficial in former cases—the injection of a 75 per cent. alkaline solution of peroxide of hydrogen directly into the larynx, by means of a laryngeal syringe. The relief given by this injection was so great that I was not compelled to intubate again, but simply to make these injections every four hours. The patient also received three injections of diphtheria antitoxin serum, which I made at intervals of twenty-four hours, and the child made a good recovery. Recently a German author called attention to the irritating effects of peroxide of hydrogen on the mucous membrane. This effect I have found in none of my cases, although this may be due to the fact that in employing this agent I make use of a small addition of bicarbonate of soda and that I adjust the strength of the solution to the requirements of the case.

"Diseases of the ear offer a good field for the use of peroxide of hydrogen. As a non-irritating antiseptic wash it is invaluable, as in the various forms of suppuration, especially when they are accompanied with a disagreeable odor. In diffused or circumscribed inflammation of the external canal, peroxide of hydrogen is useful after an incision has been made; and in suppurative otitis media, especially in neglected cases, a 5 to 15 per cent. solution is of great assistance. In cases complicated by inflammation of the mastoid cells, especially in the suppurative form, the indication for peroxide of hydrogen is clear, although this does not prevent the use of iodoform, aristol and other antiseptic agents.

"In acute cases of purulent otitis media a 5 per cent. alkaline solution should be used, as strong solutions are not necessary and may be injurious."—*Medical Record.*

EYE AFFECTIONS SEEN IN SOME GENERAL INFECTIOUS DISEASES.—Dr. Charles J. Kipp, speaking first of the eruptive fevers, says, in a paper before the New York State Society, that in measles there might be, in some instances,

serious ulceration of the cornea. Blindness after measles was, however, very rare, considering the great frequency of extensive epidemics of this disease. Optic neuritis sometimes occurred as a result of a meningitis. A destructive and rapid ulceration of the cornea after measles had been reported by several writers. Albuminuric retinitis might be observed in those cases of measles complicated by nephritis. Optic neuritis with more or less impairment of sight had been observed in convalescence from scarlet fever in cases in which there was no evidence of nephritis. The reported cases had recovered their vision. Among the sequelæ of scarlet fever might be mentioned severe conjunctivitis and keratitis and abscess of the cornea. Facial paralysis, sloughing of the cornea and optic neuritis had been seen in connection with purulent inflammation of the middle ear, caused by scarlet fever. Inflammation of the lachrymal gland was not an uncommon sequel of this disease. In smallpox the lids, conjunctiva and the cornea were most frequently affected. If the pustules were developed on the free edges of the lids they might cause marked deformity and even destruction of the eyelids. When the pustules form on the lids they should be opened and their contents evacuated. The lids should be bathed with a warm solution and some simple ointment applied. A more or less severe conjunctivitis is observed in almost every case of smallpox and quite early in the disease. In the majority of cases it presents itself in the phlyctenular form. In a series of 1972 cases of smallpox 9 per cent. had some eye complications. The variolus conjunctivitis usually passes away with the eruption, but cold applications to the lids relieve the pain and swelling, and should be used in every case. The affections of the cornea are naturally the most dangerous as regards the sight. They are most commonly seen about the fourteenth day. These cases were characterized by extreme tediousness of the healing process. This usually lasts for at least several months. Of the diseases of the uveal tract, which occasionally complicate smallpox, iritis appears to be the most common. It rarely appears until the scabs have fallen off. In septicæmia, hæmorrhages were observed in the eye, as in the other organs of the body, and they often occur at quite an early period. These hæmorrhages are not usually due to emboli, but to a change in the blood. In pyæmia, from any cause, retinal extravasations of blood are found, just as in septicæmia. In malignant endocarditis there is often seen an endo-choroiditis. In all the cases coming under his observation only one eye had been affected. The occurrence of panophthalmitis in connection with pyæmia was usually considered as a certain indication of a fatal termination; but this had not been his own experience, as some of these cases had recovered. The speaker said that he had seen a number of cases of conjunctivitis immediately following typhoid fever; but the conjunctivitis had presented no unusual features. It was probably due to the exposure of the eye to the air during the typhoid fever. Optic neuritis had been known to accompany and follow some cases of typhoid fever, and the sight had been known to have been restored. Amaurosis had been known to follow excessive hæmorrhages from bowel or nose during typhoid fever, just as it had been known to follow excessive hæmorrhage in other conditions.—*American Medical and Surgical Bulletin*.

CHARLES M. THOMAS, M.D.

MONTHLY RETROSPECT

OF HOMŒOPATHIC MATERIA MEDICA AND
THERAPEUTICS.

THE THERAPEUTICS OF RHACHITIS.—After outlining the general dietetic and hygienic measures, Dr. Payne, of Chicago, suggests the following therapeutics :

Phosphorus is the first remedy thought of. A proving of *phosphorus* gives the essential features of rickets. United with lime it is the remedy to be chosen for this disease. We want it both for its physiological and dynamic properties.

Calc. phos. gives us a perfect picture of rickets. *Calc. phos.* meets the subjective symptoms, while *calc. carb.* meets the objective symptoms.

The *calc. phos.* baby has dark hair and eyes, flabby, sunken abdomen, extreme sensitiveness of the bones, giving the indisposition to be handled, while the *calc. carb.* baby has light hair and blue eyes, is not sensitive to being handled, the abdomen is distended and large. It is the remedy for the fat, rhachitic infant.

In *silica* we have a clearly indicated remedy for rickets. It meets the bony lesion and the nervous condition. In this remedy the complexion is pale, waxy, earthy; the baby sweats profusely about the head and feet, and the sweat is offensive. In the calcareas the sweat is sour.

Sulphur meets the rhachitic symptoms. In *sulphur* there is defective assimilation. The child has a voracious appetite; it greedily takes everything that is offered as if it were starved, and still it is always hungry and looks emaciated. The food is not appropriated for the nourishment of the body.

Phos. acid must not be forgotten. It meets the extreme debility found in rickets. There is gurgling and rumbling in the abdomen, with involuntary stool; also the sensitiveness of the bony structures is met with this remedy. Its chief sphere is the nervous system, while its physical action is upon the osseous tissue.

In the active development of this disease, when there is an overexcitability of all the senses, restlessness and sudden startings, convulsive twitchings, throwing the body forward and backward or the head from side to side, tendency toward convulsion, etc., *belladonna* is the first remedy to be thought of.

Hyoscyamus is also an excellent remedy for the extreme nervous excitability with tendency toward epileptiform convulsions, with incontinence of urine. The child suddenly sickens after eating, vomits, and shows distress in stomach. It suddenly shrieks and then becomes insensible.

Stramonium meets the night terrors so troublesome in these children. The child awakens terrified, it screams with fright, knows no one. Upon awakening it is frightened at the first thing it sees and tries to get away from it. There are other remedies which should be mentioned, among them *magn. phos.* and *fluoric acid*.—*The Clinique*, May 15, 1897.

IGNATIA IN ODONTALGIA.—Mackechnie, of Bath, records the case of a

school-boy, aged 8 years, who had complained of toothache constantly for weeks. The teeth were sound. The pain occurred on any exertion, physical or mental, as when running or when doing lessons. It was also brought on by the least exposure to cold and draught. *Ipyratia*, 3x, was ordered. This relieved during the first week, and was taken for three weeks, by which time all tendency to pain was removed.—*Monthly Hom. Review*, May 1, 1897.

MERC. CYANATUS IN DIARRHŒA.—Mackechnie reports the case of a housewife, aged 25 years, who, in August, was seized with aching pain in the hypogastrium, with frequent dark-colored stools, chiefly of scybala. Much tension and flatulence, which rumbled in abdomen. Nausea, but clean tongue. Metallic taste in mouth. Frontal headache and vertigo. Anorexia, and pink sediment in urine. Ordered *merc. cyan.*, 3x. In two days she was practically well, stools loose, but painless and infrequent, and she complained only of a bad taste in the mouth.—*Monthly Hom. Review*, May 1, 1897.

SANGUINARIA IN ADENITIS.—Mackechnie chronicles the case of a woman, aged 47, who suffered for some time from swelling and tenderness of the cervical glands; they were hard and painful on pressure or moving the head. Her appetite was bad, bowels normal, but menses irregular. Urine high-colored, with pink deposit. There were pains in the lumbar region, worse at the periods; she had frequent flushings. Ordered *sanguinaria*, 1x gtt., ter die. The following week the glands were less swollen and no longer painful, the urine was clear and the back-pains relieved. Flushings continued and seemed to radiate from the epigastrium. *Sanguinaria* was repeated and she was next reported as cured.—*Monthly Hom. Review*, May 1, 1897.

THE USE OF CACTUS IN CARDIAC AFFECTIONS.—According to Dewey, it is in heart affections that *cactus* exerts its specific action. In valvular diseases of the heart, especially mitral regurgitation, where the constrictive feeling is present, it has proved a valuable remedy; also in carditis and pericarditis, with dropsical swelling of the extremities. Special symptoms are pain extending from heart, down the left arm, into the fingers, difficult breathing, palpitation worse at night, from the least excitement and when lying on the left side. The palpitation is worse at the beginning of a movement. In all these conditions the sensation of constriction about the heart must be present to properly indicate the remedy. It has been found beneficial in cardiac hypertrophy, but here, according to Hale, it is better given in potencies above the sixth decimal; and Dr. E. D. Morgan reported a case of cardiac dropsy cured by the 3d and 200th potencies when the tincture failed. *Kalmia*, *spigelia* and *bryonia* are prominent remedies for pain in the cardiac region, but none of these has the peculiar constriction of *cactus*.—*Medical Era*, May, 1897.

THE GENERAL ACTION OF CACTUS GRANDIFLORUS.—Dewey, of Ann Arbor, notes that *cactus* acts powerfully on the heart and arteries, as does *aconite*. According to Rubini it destroys congestions and represses irritations and does not weaken the nervous system, as does *aconite*. He therefore considered it preferable to *aconite* in all cases of inflammations, especially in patients with lymphatic or nervous temperament. His views, however, have not stood the clinical test. It produces an irritation of the cardiac ganglia and seems to cause contraction, especially of the circular fibres of the heart.

It also causes a earlitis, and a pericarditis, thereby differing in its action from *digitalis*—*digitalis* not producing the latter affections and acting on all fibres of the heart alike. *Cactus* resembles *bryonia*, *aconite* and *spigelia*, rather than *digitalis*. It causes irritation, hyperesthesia, neuralgia, spasm and palpitation of the heart. It also has a marked action on the pneumogastric nerve, which explains its use in constrictive asthma, acidity and indigestion. It seems to possess a periodicity resembling *cedron*, and it has been used successfully in intermittent fever.—*Medical Era*, May, 1897.

IODOFORM IN NERVOUS DISEASES.—In the pathogenesis of *iodoform*, published by Dr. Marc Jousset, we find the following symptoms which are somewhat similar to those of locomotor ataxia: great weakness of the legs, impossible to stand; walking very difficult when the eyes are closed; stiffness of the limb; dilatation of the pupils, which contract unequally and react poorly to light; diplopia; paralysis of the sphincters. *Iodoform* has been used successfully in tubercular meningitis, and evidently exercises a marked action on the nervous system.—*Medical Century*, May 1, 1897.

THE THERAPEUTICS OF LOCOMOTOR ATAXIA.—Dewey reviews the remedies whose use on theoretical grounds has been justified by practical results. *Argentum nitricum*, the pathogenesis of which, perhaps, presents more symptoms of typical cases of tabes than any other remedy, is awarded first place. *Alumina* also stands near the head of the list. It has the ataxia and the fulgurating pains, and the weakness and the formation. It was first recommended by Bœnninghausen, and has been repeatedly verified since his time. *Secale cornutum* is a third remedy which produces a condition very similar to locomotor ataxia, including the three symptoms of absent knee-jerk, fulgurating pains and ataxia. Cases of poisoning by ergot have proved that changes in the spinal cord wonderfully similar to those found in locomotor ataxia are produced by the drug. *Silica* is recommended for the tendency to overgrowth of neuroglia, with its resultant contraction and sclerosis. Prescribed for its own peculiar symptoms, it may be advisable to give it intercurrently for a long time, even months. *Plumbum* presents a pathological similarity to locomotor ataxia, and Lilienthal reported favorable results from the use of *plumbum phosphoricum*. *Belladonna* may prove useful in the early stages, and the painful sexual excitement of the same period may call for *picric acid*. *Phosphorus* and *nux vomica* may be called for, while the syphilitic origin of the disease may demand *nitric acid* or *kali hydriodicum*, the latter to be used in homœopathic potencies, not in crude doses.—*Medical Century*, May 1, 1897.

PLANTAGO MAJOR.—A snake-tamer divulged his secret of making rattlesnake bites harmless, and showed upon himself the action of the drinking of the juice of the *plantago major* and the application of a poultice of the crushed leaves to the bitten part. In poisoned wounds from catfish horns *plantago* applied acts excellently. The action of *plantago* in neuralgic earache, with the pains going from one ear to the other through the head, as well as its local use in toothache in hollow teeth and its use in enuresis, should not be forgotten.—*Medical Century*, May 1, 1897. (Dr. Charles Caleb Cresson in an able article in 1854 called attention to *plantago major* in snake bites, etc. The papers were republished in the *Homœopathic Recorder*, June, 1896.—Ed.).

A CHARACTERISTIC SYMPTOM OF COCAINE.—Magnan described as a characteristic symptom of *cocaine* poisoning an hallucination of sensation, which consisted of a sensation as if foreign bodies were under the skin, generally small, round substances like grains of sand. Horsakoff reported the case of a woman suffering from multiple neuritis, who complained of a sensation as if a worm were under the skin. This woman was being treated at the same time for a uterine affection by means of vaginal tampons containing *cocaine*. A discontinuance of these caused the subcutaneous sensation to disappear.—*Medical Century*, May 1, 1897.

EQUISETUM IN POST PARTUM RETENTION OF URINE.—Ord, of Bourne-mouth, refers to the case of a woman who had always suffered from retention of urine after parturition, generally requiring the catheter for a week or more. After the birth of her last child the retention was accompanied by much distress and nervousness, with tenesmus. For two days *belladonna* Φ in drop doses relieved, and then failed. Having seen *equisetum* highly recommended in this condition, and other drugs having given no relief, he decided to try it, but found that the local chemists had none in stock. To have obtained a supply from London would have involved many hours' delay, and the patient's distress was very great, two fomentations, enemata and other devices having utterly failed. However, a friend fortunately remembered that the plant grew on the downs near Swanage, and very kindly went off at once in quest of *equisetum*. Some specimens were obtained, and at once placed in alcohol, and in an hour's time a fresh plant tincture about 1x strength was thus obtained. This was given in five-drop doses every hour, with immediate relief. Water was passed naturally after the second dose, and there was no recurrence of the trouble. The patient did not know until afterwards the circumstances under which the medicine had been obtained. He has since used the same tincture in a case of retention during peritoneal crises following dysmenorrhœa in a very neurotic patient with equally satisfactory results.—*Monthly Hom. Review*, May 1, 1897.

THE CHARACTERISTICS OF LACHESIS.—Monroe, of Louisville, recapitulates as follows:

General Effects: Blood decomposition and separation of its elements, producing redness, petechial spots, dark, liquid hæmorrhages looking like "charred straw," making it suitable to low grades of inflammations with gangrenous symptoms, sensorial excitement, with loquacity, followed by muttering delirium, with hallucinations pointing to suspicion, distrust, dread, or "he thinks he is dead." This being accompanied by great physical exhaustion, muscular tremor and weakness, blood stasis and blood disintegration, points to low forms of fever with typhoid or septic symptoms, and to malignant exanthesis.

Characteristics:

- a. Aggravation of all symptoms after sleep.
- b. Nervous hyperæsthesia, shown by intolerance of touch or contact.
- c. All painful symptoms are better after discharges, critical or otherwise.
- d. Left-sided diseases.
- e. Tongue trembles when protruded (apis).
- f. Mental symptoms pointing to dread, fear, suspicion.
- g. Spasmus glottidis.
- h. Pains are burning (the pains of tissue destruction).

i. Craves oysters.

j. All discharges fetid.

—*Medical Century*.

PHOSPHORUS IN WOUNDS.—Phosphorus is a valuable remedy in wounds when they are extremely sensitive and bleed freely. The characteristics of the drug must, of course, be present, as, for instance, the tall, spare, red-haired individual, and a wound that is always ready to bleed upon the slightest provocation.—*N. A. J. of Hom.*

SANGUINARIA IN BLEPHARO-ADENITIS.—Benefit has been derived from its employment in these cases where there is a feeling of dryness under the upper lid and burning in the edges of the lids, with accumulation of mucus in the eye in the morning.—*Hom. Eye, Ear and Throat Journal*.

SOME COLD DRUGS.—The *Chironian* (March 1, 1897) suggests the following:

Camphor.—General coldness of the whole body, but usually with dry skin.

Veratrum Alb.—Coldness of surface of body and of extremities, with cold sweat, especially on forehead.

Secale Cornutum.—Dry coldness of body; cannot, however, tolerate any covering.

Carbo Vrg.—General coldness, but wants to be fanned.

Aranea Diadema.—Coldness, with scarcely any fever, sweating or fever stage.

ANTIMONIUM CRUDUM IN PERSISTENT VOMITING.—Heath, of London, records the case of a woman, æt. 60, who for four months had been under an allopathic physician without the slightest benefit for the following symptoms: "Violent retching and copious vomiting every other day, or three times a week, of fluid-like pea soup." Between the attacks, to use her own words, "she was so dreadfully exhausted that she went to sleep like a baby in her chair." During the attacks she had terrible pains, as if a sword was passed through her from front to back, *cutting*, making her cry out; *great burning*. Gentle rubbing relieved her back, which, with the stomach, was exceedingly sore; *tongue quite white*. *Ant. crud.* 30 night and morning.

In a week she reported that from the first dose of medicine she had had no sickness or pain and felt quite well.—*Homœopathic World*.

PHASEOLUS, A NEW HEART REMEDY.—Cushing, of Springfield, in a paper read before the Massachusetts Homœopathic Medical Society, records his experience with phaseolus, or the common white bean. He refers to a proving made by himself, showing wonderful effects upon the nervous system, the genital organs, stomach, bowels, and kidneys; and states that a medical student has made a short but interesting proving partially confirmatory of his own. While the former was going on nicely, he suddenly felt a curious sensation in the region of the heart; it was so sudden and strange that he immediately felt his pulse, and found it very irregular and feeble, so much so that he was frightened, and took no more of the medicine. Never before had he had any irregular action of the heart. Soon after he read that foreign physicians were using a decoction of the growing bean and pod for dropsy. In conclusion Dr. Cushing describes several cases in which more or less remarkable effects are attributed to the use of the bean.—*N. E. Med. Gazette*.

F. MORTIMER LAWRENCE, M.D.

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HAHNEMANN'S ERRONEOUS EXPLANATION OF CURE.

BY CHARLES S. MACK, M.D., LA PORTE, IND.

I HAVE just been reading Hahnemann's *Organon*, and, in his *Materia Medica Pura*, his *Spirit of the Homoeopathic Medical Doctrine*. As ever, I arise from reading these with a glow of enthusiasm over homeopathy, and with profound admiration for Samuel Hahnemann. There can be no possible doubt that the memory of him whose portrait hangs over your desk and over mine will be more and more revered as time passes, and as the appreciation of his work becomes more general and more genuine. His sensible and fearless attack upon the old-school practice of his day; the courage with which he entered the all but unknown field of *materia medica pura*; the patience and persistence with which he labored, and the reform which he wrought, mark him as a very extraordinary man. In the history of medicine there is no record of genius or of hero if Samuel Hahnemann was not both.

Thus far, by way of preface, to comment upon his erroneous explanation of the cure attainable by similars. I think there would be no occasion for a law in order to the cure which he

thought similars accomplished. That cure, as explained by him, was simply the effect of substitution or supersession—a part of rational medicine based upon the theory that a drug will displace a disease the unmodified effects of which are similar to its own unmodified effects. Now, if it were possible (which I doubt) to, with a drug, displace a disease which, in effects, is similar to it, there would not be the least occasion for a law as a guide to such substitution. *Similia similibus curantur* and *no two things can occupy the same space at the same time* would simply be two expressions of one and the same principle. No; I think Hahnemann's conception of the cure attainable by similars was entirely false.

I suppose that the view I have just expressed is that held by most of those who will read it. Agreed that Hahnemann's definition of the cure attainable with similars is not correct, can we formulate one that is correct? The following seems to me to be so: The cure attainable with similars is *such modification of the quality of vital processes and their effects that, whereas these processes and their effects are abnormal, they shall become normal (or approximately so) as the immediate effect of the drug used.* Of course, *immediate* here does not have reference to time, but means that the drug effects this cure without first producing some effect mediate to it. If this is a correct definition of the cure attainable by similars, it would seem desirable that this definition (or other definition or definitions to the same effect) should become widely known. The advantages that would accrue from there being a widespread knowledge of just what is the cure essayed in the practice of homœopathy would be great. I suppose that every homœopathic physician who, at times, practices something else than homœopathy, is from time to time asked by patients, or by an old-school physician, how he reconciles his occasional excursions into non-homœopathic practice with his avowed allegiance to *similia* as law. I do not see how one can answer that question as satisfactorily without a definition of the cure attainable with similars as he can when in possession of such a definition. When he can give a concise and accurate definition of that cure, he has simply to say that *similia* is the law of that cure, and that when practicing something else than homœopathy he is undertaking something entirely different from that cure. Again, this definition clearly stated and

understood, the patient or old-school physician whom you are instructing can see at a glance, if he will, that the cure thus defined cannot be intelligently undertaken in rational practice, nor in any way other than under guidance of a law of nature stating what relation between a disease and a drug, as known in the effects of vital processes immediately modified by them, marks that drug as capable of effecting that cure; for essential to that cure is a definite modification of vital processes which, *per se*, are unknowable to inductive science, and can be known to science only in effects. Thus, with this definition, you can easily show both the necessity of a law of nature in order to the cure thus defined, and the consistency with which one may be enthusiastic over homœopathy, and at the same time enthusiastic over rational practice, or anything else that is good in medicine.

Another advantage of having ready for use a concise and accurate definition of the cure attainable with similars is, that it makes it easy to show why those who believe in *similia* feel under obligation to identify themselves by name with homœopathy, though they may at times practice something else than homœopathy. A glance at the definition shows that the cure attainable by the use of similars (an immediate and more or less radical transformation, both in processes and in their effects), in a sense ranks higher than any other cure which one can attempt with drugs; hence the obligation felt by those who believe in *similia* to make sure that, whatever else happens, homœopathy shall not be lost sight of—to make sure that their fullest support is given to it in opposition to those who would obliterate from the face of the earth every vestige of that which ranks highest among possible cures with drugs.

I have pointed out the usefulness of a correct definition of the cure attainable by similars, when one would satisfactorily answer questions from intelligent patients and from old-school physicians. I think that familiarity with definition of this cure would be immensely useful to students in our colleges. I am satisfied that we graduate every year many students who, for lack of just such definition, are unable to satisfactorily answer perfectly legitimate questions as to their attitude toward homœopathy.

THE RECOGNITION OF REFRACTIVE ERRORS BY THE GENERAL PRACTITIONER.

BY CHARLES H. HUBBARD, M.D., CHESTER AND PHILADELPHIA.

(Read before the Society of Chester, Delaware and Montgomery Counties, December 7, 1897.)

RECOGNIZING the want of positive information by the general practitioner in regard to the symptoms indicating refractive errors, and being solicited at different times to designate some easily recognized indications and methods of detecting optical error, the writer of this paper has undertaken the pleasant task of supplying the desired information. While no attempt is made to enlighten the skilled ophthalmologist, it is our earnest desire to so elucidate the subject that the physician for whom this article is prepared shall find a plain and practical guide whereby the anomalies of refraction may be easily recognized. Hence, we shall attempt to avoid technicalities and unnecessary elaboration of detail. Let it be clearly understood, however, that where the working-tools of the oculist—the implements of scientific precision—are not employed, there are no positive signs and methods by which refractive troubles can be diagnosed with absolute certainty. But there are many symptoms, if properly interrogated, that give strong presumptive evidence of optical defect. And there are certain tests that can be easily employed to assist in arriving at a probable conclusion.

The many and varied symptoms by which these abnormal conditions manifest themselves in the complex and wonderful mechanism of the human economy is almost beyond belief. And the bewildering throng of reflex neuroses present an array of symptoms that is truly appalling, and seriously complicate a thorough understanding of refractive troubles.

The eye, in this age of modern civilization, is greatly over-taxed at the *near-point*, and when we consider the co-relationship existing between the eye and all cerebral and physical operations we are not surprised at the growing demand for glasses. We should not forget that *diseased* conditions of the eye—usually progressive—accompanying errors of refraction, not only require lenses for their relief, but demand internal

and, perhaps, local treatment. Where ocular disturbance exists in the sick, and in those convalescing from acute disease, or debilitated from any cause, lenses, as a rule, should not be prescribed until the patient has regained his health. There are cases, however, where it may be wise not to wait for complete restoration to health. Especially in chronic cases, and also in those where an absolute cure cannot be expected, the patient should have all the benefit that can possibly accrue from properly fitted glasses. The lenses may need to be changed as the patient's health improves, and in many cases the glasses can be wholly discarded with the patient's restoration to normal health.

The faculty of perfect visual acuity is one of the most wonderful and complex manifestations of vital and physical phenomena. It is authoritatively stated that not more than 15 per cent. of the people are born with perfectly round eyeballs, and hence 85 per cent. must be optically imperfect. Mathematically, a perfect eye has never been discovered. Hence, when we consider the refractive errors occurring as a result of disease, and the great number due to abuse of the visual apparatus, together with the 85 per cent. born with deformed eyeballs, and the necessary expenditure of nervous force to maintain fair visual acuteness, we can begin to appreciate the full significance of this intricate and important subject.

The normal eye, with its accommodative apparatus at rest, will focus parallel rays of light on the retina. In refractive work rays of light emanating from a distance of at least five (5) metres are for all practical purposes regarded as parallel, and an eye with normal acuity of vision should distinctly see at that distance, and, under proper conditions, all objects that are within at least a five-minute angle. When such acuity of vision does not prevail, then derangement of function or structure assuredly exists.

Refraction of the eye is that optical state or ability by which rays of light entering the eye are brought to a focus upon the retina.

By *accommodation* we mean the ability of the eye to so change its optical state that its refractive power is lessened or increased. This accommodative function is effected by the contraction of the ciliary muscle, thereby relaxing the tension of the suspen-

sory ligament and capsule of the lens, and thus the crystalline lens becomes more convex by virtue of its own normal elasticity. And this contraction and relaxation of the ciliary muscle is consensual with ocular convergence and the contraction and dilatation of the iris.

With increasing age the flexibility of the lens becomes impaired, the ciliary muscle atrophies, and the accommodation is thus diminished and finally lost. This practically constitutes *presbyopia*.

We now consider those conditions which may cause impairment of vision due to *organic changes* in the visual apparatus, and which may not be suspected by the patient or his medical adviser, viz., cataract; various kinds and degrees of opacities of the refractive media; anterior and posterior synechia; posterior staphyloma; conical cornea; disorders of the vitreous body; dislocation of the crystalline lens; sympathetic ophthalmia; various forms of choroidal and retinal disease (the detection of albuminuric retinitis by the oculist is often the first suggestion of renal lesion); glaucoma; toxic amblyopia; paralysis or spasm of accommodation; tumors; cerebral disease; lesion of the spinal cord, and diseases of the optic nerve, choked discs, etc.

Ocular reflex neuroses play an important part in eye disturbances, and the discovery and removal of these disorders, originating in remote foci, is frequently demanded before the ocular troubles can be removed. The lesion may reside in the brain or spinal cord; it may be due to paralysis or irritation of nerves; sexual irritation; suppression of menstruation and various ovarian and uterine disturbances; hysteria; syphilis; rheumatism; neuralgia; ear, heart and kidney disorders; diseased teeth; orificial irritation—particularly nasal, stomach and intestinal disorders. Diphtheria and many infectious, contagious and constitutional troubles may be the exciting cause.

There are also many reflex neuroses due to ocular defects, and seriously involving other parts remote from the eye that are removed only as the eye trouble is corrected. The various eye, head and nervous symptoms that should excite our suspicion of possible ocular defect and lead to an examination of the visual apparatus, especially when careful treatment by the medical attendant fails to establish the needed relief, shall now

engage our attention. First, we mention the almost universal complaint—headache. Pain in and around the eyes is a frequent symptom, while other prominent signs of refractive error may be indicated by vertigo, neuralgia, photophobia, lachrymation, twitching of eyelids, ptosis, strabismus, double vision, dilatation and contraction of the pupil, flashes of light, appearance of spots or mist before the eyes, subjective color and light sensations, restlessness, insomnia and mental aberrations, epilepsy, chorea, inebriety, nervous dyspepsia, sudden and momentary loss of sight, conjunctivitis, blepharitis marginalis, styes, chalazion, corneal inflammation and ulceration, recurrent erysipelas, etc.

The following symptoms should excite suspicion of muscular errors: dull pain or strained feeling in the forehead; cannot keep awake when reading or at any place of entertainment; artificial light causes eye to feel heavy, and when eyes are tired print may seem double; vertigo and nausea when riding in cars; nervousness; and, in fact, the variety and degree of mental and physical disorders attributed by some authors to the ocular muscles almost passes belief.

With these objective and subjective symptoms of refractive error we have other signs that point almost unerringly to some form of ocular defect, always remembering that organic disease may be an associate factor. When a patient says that he can see distant objects distinctly but complains of not seeing clearly at the near-point, or when, using the eyes for near vision, particularly in artificial light, objects seem to run together, especially small objects; reading type may appear double or indistinct; the eyes are easily fatigued; much troublesome lachrymation; itching and burning of the eyes, with dryness; feeling as of sand or some foreign substance in the eye; sensation of weight or pressure on the eyelids; small objects at a distance may be seen more distinctly from prolonged fixation, though the eyes feel tired from such use; pain in and around the orbit, with frequently recurring headaches. With the above symptoms we would suspect hyperopia (far sight), and perhaps astigmatism or muscular error. We may suspect myopia (near sight) when a complaint of double vision; nipping of the lids; vision for distant objects impaired, though sees well at, or closer than, the normal near-point; spots appear before the eye; intolerance of

bright light; eyes develop a tendency to diverge; may see best with head turned to one side, or by using one eye only for near work.

Astigmatism may be associated with above symptoms.

When a patient has reached the period of forty or forty-five years of age, and holds small objects further than previously—when, reading, he shows a desire to place the light between the book and his eye, and at the same time requires a stronger light than formerly—you can usually diagnose presbyopia. Though the refraction of the eye is reduced with advancing age, the visual acuity is not necessarily impaired.

When a child complains of inability to see characters on the blackboard at school, or has difficulty in seeing objects distinctly at all distances, it does not imply stupidity, obstinacy, or moral turpitude, as some ignoramuses seem to infer, but a pronounced error of refraction. Many a child is ruined morally, mentally and physically, because of the ignorance, thoughtlessness or cupidity of those in charge. The law now in force in some parts of the country, making an examination of the eyes of school children obligatory, is certainly a move in the right direction.

In our deductions, based on the foregoing, we should not lose sight of the fact that when vision for the near and far point are both defective, an organic lesion, instead of refractive error, may be at fault, though the structural and refractive trouble may be combined.

With the above indications of optical defect as a basis, we now endeavor to ascertain if error of refraction exists. It is not necessary for our purpose that we shall determine the kind or degree of visual error and its correction. The object is to ascertain if sufficient indication of ocular disturbance exists to warrant the physician in sending his patient to the oculist. Such acquired knowledge may relieve the practitioner from the embarrassment of unsuccessfully treating cases that simply need spectacles for their relief. Patients not requiring the attention of an oculist are seldom sent to him. On the contrary, altogether too many are suffering the consequences of ignorance and neglect. And the progressive physician of the present day is not slow to recognize these facts. Such a one should provide himself with a Snellen's test-type, graduated, to be read

from 4 to 6 metres; also a test-type for near vision would be a convenience. He should have not less than four spherical lenses, two plus and two minus, designated by the decimals 0.25 and 0.50, indicating a quarter, and a half dioptré respectively, each lens being marked by the + and — signs to easily distinguish them, and the number to correspond to their refractive power. A lens of one metre focus (practically 40 inches) is taken as the unit and is called a dioptré. Some oculists use a test-card having parallel lines arranged to run in different directions like a clock dial, and then have the patient observe which set of lines are seen most distinctly. And it may be well to have this astigmatic card, but it is decidedly unreliable, leading to confusion and gross error.

Now, with your patient seated 16 to 20 feet distant from the test-type, the card in a good diffused light, with the patient's back towards the source of illumination, the left eye excluded by an opaque cover (or the better eye, if a difference seems to exist), each eye being tested separately. The patient is directed to read the largest line at the top of the card, proceeding until he has read the smallest letters that can be seen distinctly. This will represent his relative visual acuity for that eye. Then proceed in like manner with the other eye. If he fails to read the letters correctly at the distance for which they are marked, refractive error exists. And if indistinct vision for both the near and distant point is discovered, organic disease instead of optical error may be the cause of poor vision. Though the patient may be able to read the 6 metre line at 20 feet, its proper distance, we are not to decide that he has normal acuteness of vision. He may be using his accommodative power. This same accommodative function may also make it possible to see with apparent equal clearness through lenses of different degrees of refraction. We now place our plus spherical lens before the eye under examination, and if it improves the vision, or *does not make it worse*, we have a manifest refractive error; and in a person under forty-five years of age, probably a latent defect also. However, if the +.25 lens impairs the vision, then try the —.25, and if it improves vision at the distant point, a manifest myopic error can usually be concluded. If the patient will bear the .50 spherical lens, still greater proof of optical defect exists. Though a patient may reject all plus lenses and

accept a minus glass, we are not always justified in diagnosing myopia. It may be a case of spasm of accommodation. In such a condition the use of a mydriatic to put the accommodation at rest will change an apparent myopia into that of hyperopia, the actual refractive error.

As many patients learn the test-letters quickly, and others are good guessers, oculists have two or more test-cards with a different arrangement of the letters, and change the cards as the patient becomes too well acquainted with them.

To determine the accommodative power, the near or reading test-type is employed, finding the near- and far-point at which the patient can read distinctly. This test is of especial value in detecting presbyopia, particularly when the distant type gives no evidence of refractive error. The accommodative power not only diminishes with advancing age, but visual acuity suffers because the transparent media undergoes retrograde metamorphosis in form and structure. And when this age is reached, usually approximating the forty-fifth year in the emmetropic eye, glasses should be worn for all near work, no matter whether asthenopic symptoms be complained of or not; and such glasses usually need changing every one, two or three years until the age of fifty-five to sixty, when a longer interval may occur. The hypermetropic eye may need glasses for near vision sooner than an emmetropic eye, and the myope may never require a glass for presbyopia. When the recession of the near-point has reached nine English inches, a weak convex glass not only prevents eye-strain, but delays senile changes, and thus preserves the sight. When cases of this kind persist in getting along without spectacles, a glass of much greater refractive power is required when the inevitable finally overtakes them than would otherwise be the case. Such patients frequently require repeated examinations to detect and accurately correct their visual error, and many uncorrected abnormal conditions of long standing may develop permanent results that can never receive satisfactory relief.

Impaired vision and eye-strain, due to derangement of the ocular muscles, are often more potent factors in causing these disturbances than is a refractive error. And no eye should be considered properly examined and refracted until the various muscle-tests have been carefully employed. And the results of

these tests often determine the glass to be prescribed. On the other hand, refractive anomalies often disturb the muscular equilibrium of the eyes, not infrequently causing strabismus.

The country fairly blossoms with deluded victims, bravely struggling with misfit spectacles. Much of the work coming to the oculist consists in examining and correcting eye troubles where the patient is already the proud or disgusted possessor of some kind of a glass; and only too often the existing error is intensified, and the discomforts of the individual correspondingly augmented, because of these spectacle-blunders. The family physician should disabuse the mind of the patient from the fallacious expectation that *one* examination by the oculist can correct a defect which has existed for years; neither is it reasonable to expect a positive diagnosis and prognosis of every case upon the first investigation. Though it is generally admitted that the treatment of ocular disorders has reached a higher degree of perfection and has come nearer to an exact science than any other branch of medical practice, it is not therefore to be inferred that absolute perfection has been attained or supernatural powers developed. As previously intimated, some cases are never treated to the perfect satisfaction of the oculist or the patient. Many go the rounds of the eye-specialists and spectacle-venders vainly seeking for the impossible. An apparent mistake is not always to be accepted as such. Many eyes undergo changes that require a frequent change of the glass, while some patients, as the result of sickness, accidents, etc., demand early and repeated changes in the glasses prescribed. Again, some individuals are so constituted, mentally or morally, as to make an accurate correction of their refraction an impossibility. However, the oculist who forgets that his patient is a human being, and not a mere optical instrument, will many times fail to give the expected relief; and the odium of his failure is but the just and inevitable expression of an outraged vitality.

CALCAREA CARB. is indicated in enlargement of the liver, which is sore, with jaundice. Gall stone colic, terrible darting pain, profuse sweat, intolerance of garment about waist. Tendency to great increase of fat in the abdomen and flatulent distention, enlarged mesenteric glands, abdominal dropsy, umbilical hernia.

PROSTATIC HYPERTROPHY—A NEW OPERATION.

BY W. E. RELLER, M.D., COUNCIL BLUFFS, IOWA.

THIS operation is still on probation, but that it will accomplish good results, in certain conditions, has already been proven. My experience with this method is limited to a single case, but the result was so brilliant that it may be interesting to others.

An old gentleman, 79 years of age, quite corpulent, has been troubled for many years with retention of urine. For eighteen years he had been obliged to use a catheter to empty his bladder. During the last five years he has had several attacks each year of inflammation of the prostatic urethra and neck of the bladder, during which he was unable to introduce his catheter, which was of soft rubber. About two years ago I was called to relieve him in one of these acute attacks, which were gradually becoming more severe and of longer duration. After some difficulty he was relieved with a metal catheter. The prostate gland was found to be very much enlarged and indurated.

During the latter part of 1895 I used the steel sounds, with the result that during the latter part of 1895 and the forepart of '96 he was comfortable. During all this time he used his catheter about every two hours during the night and almost every hour during the day. In May, '96, he had one of his attacks, and in spite of everything I could do I was obliged to draw his urine every three and a half to four hours with a metal catheter, day and night, for six weeks. The urethra was very torturous, and at times it took considerable manœuvering to introduce the catheter. During these attacks he suffered intense pain. All the therapeutical means and all the adjuvants that promised any hope of relief, including irrigation, instillation, etc., were tried. After constant attention for more than two months he recovered so that he could use his soft catheter, but this improvement was of short duration. Within ten days he was obliged to again call for help. During the last attack opium suppositories were introduced high into the rec-

tum. It was soon necessary to increase the amount of opium, and by July 1, '96, he was taking one suppository, containing four grains of opium, every six hours.

I had suggested an operation to him before this, but now I urged operative measures as the only means of prolonging life. His family and friends had given up all hope of his recovery, and as he himself was tired out with long suffering, on July 17, '96, consent to operate was given. The pubes were shaved and scrubbed, and the field of operation rendered thoroughly antiseptic. An incision was made about two inches in length, starting a little above the external ring, extending downward, parallel with the cord. The vas deferens was then picked up and severed, the cut ends were turned back on themselves, and the loop thus made ligated with catgut. The spermatic artery was then ligated with chromotized catgut. Each side was treated the same way. The wounds were closed with interrupted silk ligatures and dressed with gauze and a bandage. The wounds healed nicely, there being but very little discharge. There was no perceptible change until the tenth day after the operation, but from that time on there has been a constant improvement in every way. The first improvement experienced was the gradually increasing facility with which the catheter could be introduced. Later he said that "he felt better than he had for years." He still uses his catheter once or twice a night, and every four or five hours during the day. The prostate gland is very much diminished in size, and the testicles are about three-fourths their former size.

Some may think it unnecessary to cut the vas deferens, and that ligation will answer just as well. This may be true, if the ducts were thoroughly constricted with strong silk cord. A case is recorded where a surgeon ligated the vas deferens, after which they still remained previous. I ligated the spermatic arteries to obtain speedy results. By cutting off the arterial supply I think atrophy was much more rapid than it would have been otherwise. In an ordinary subject the operation is comparatively simple, but in a case where the patient is very corpulent, some difficulty may be encountered on account of excessive adipose tissue, unless the operator possesses considerable skill as a surgeon. The great difficulty with this operation is in gaining the patient's permission to operate, as

very few will submit to be unsexed until it is too late to benefit them.

At the time of this operation I could find reports of only five of similar character. They were all of recent date, and no operator had had more than two cases. But the results of all were, in the main, the same as I have just related. The advantage of this method over castration is self-evident, the latter being much more dangerous, and the patient will object much more to it than to the former.

The philosophy of the operation is based on the fact, accidentally discovered, that ligation of the vas deferens or spermatic artery causes atrophy of the testicles. This led to further investigation and experimenting on this line, and it was found that ligation of the vas deferens caused atrophy of the prostate gland, and this is the object in view when performing the operation. By causing atrophy of this gland the torturous urethra is straightened and the dam in the bladder caused by the hypertrophy of the prostate is, in a measure, removed, thus doing away with the residual urine, which is the cause of the recurrent attacks of cystitis to which these sufferers are usually subject.

Should this method prove applicable generally to these cases, it certainly will be a decided step in advance in the treatment of this painful malady, which is rightly named "Old Man's Bane."

AN INVESTIGATION OF SCOPOLAMINE AS A MYDRIATIC.

BY WILLIAM SPENCER, M.D., PHILADELPHIA.

(Read before the A. R. Thomas Club, of Philadelphia.)

OF the plant *scopolia* there are several varieties—*scopolia atropoides*, *s. japonica*, *s. concolor* and *s. carniolica*; the latter is the most plentiful, and is a common plant in Bavaria, Austro-Hungary and Southern Russia. This, although not a new plant, has never received enough attention to have risen above a foot-note description in any of our works on *materia medica*. The plant contains, according to the investigations of Dr. A.

Lanygaard, two alkaloids, one of which belongs to the group of tropeines.

The alkaloid I have used has been that manufactured by Merck, of Darmstadt, who claims to use the plant indigenous to Japan, *scopolia atropoides*, exclusively in its preparation.

In the revision of the German pharmacopœia of 1890 this alkaloid was admitted under the name of hyoscyne, but in the following year, in a supplement, the commission adopted the name scopolamine, to replace hyoscyne. The reason assigned for this change was that while hyoscyne is the active principle of *hyoscyamus niger*, nearly all the hyoscyne in the market is supposed to be obtained from one of the varieties of *scopolia*, and hence scopolamine would more correctly indicate the source of the alkaloid.

“There is no doubt but the genus *scopolia* is the connecting link between *belladonna* and *hyoscyamus*, resembling *belladonna* in leaf and flower. The general appearance is that of *belladonna*, but it is much shorter, rarely growing above a foot in height, and has thinner leaves, and is especially distinguished by its fruit, bearing a transparent deliscent capsule, and by the presence of a distinct rhizome. According to Mr. Thomas Greenish, the microscopic difference is that the bark is not so thick, the dark lines under the epidermis narrower, the vascular bundles neither so large nor so numerous, and the starch grains are all smaller and their shape less distinct.” With such a marked similarity in the structure, we would expect to find their active principles to be substantially identical with each other. But while in the chemical formula the elements are the same, they are found to be in different proportions, so that there is an entirely different molecular arrangement. The chemical formula of hyoscyne, as well as that of atropine and the other tropeines, is uniformly found to be $C_{17}H_{23}NO_3$, while that of scopolamine is $C_{17}H_{21}NO_4$, which is obviously quite different. In referring to hyoscyne, let it be understood that the alkaloid as obtained from *hyoscyamus niger*, according to the official formula in the *United States Pharmacopœia*, is the one meant.

Scopolamine, although a congener of all the alkaloids of the plants of the natural order, solanacea, yet it differs from them in many of their physiological actions. All the alkaloids,

atropine, hyoscyne, duboisine and daturine, are classed by Barthelow as excito-motors, and are so similar in their physiological actions that a single description is applicable for all of them. This writer says:

"They are extremely diffusible substances. They affect the circulation in a remarkable manner, at first slowing the action of the heart, followed quickly by a very decided rise in the number of pulsations, as well as the vigor also. The vaso-motor ganglia throughout the body are stimulated, producing a general rise of blood-pressure and increased temperature."

The respiratory movements are increased in number and depth. They cause a diffuse redness of the skin and of the fauces, producing a dryness of the mucous membrane. The cerebral cortex is stimulated, producing headache, vertigo, illusions, hallucinations, delirium and nausea occasionally, due to the cerebral disturbance. The pupil of the eye is dilated, the accommodation paralyzed, and if their use is long continued will produce a catarrhal condition of the conjunctiva, of the follicular variety.

To Kobert and Rahlmann we are indebted for very careful and elaborate investigations of the physiological actions of scopolamine. While simulating the other mydriatics in many points, one cannot but be impressed by certain advantages which ought to commend it to our careful consideration. Its effect is to retard the circulation, lower the blood-pressure and slow the pulse by a diminution of the vaso-motor tonus. It causes a cerebral paralysis, and has very few of the cerebral effects of the excito-motors, hardly a nervous restlessness. There is no dryness of the mucous membrane produced. A giddiness, fatigue and sleepiness are among the worst results. It dilates the pupil of the eye and paralyzes the accommodation quickly and intensely, acting with much more energy than any of the other tropeines. Its action on the conjunctiva of the eye is characteristic and peculiar to itself, with the exception of cocaine. When instilled in the eye the conjunctiva becomes pale, but not dry, instead of being hyperemic, as is the case with the other mydriatics. This is due to its effect on the vaso-motor, by stimulating the fibres of the sympathetic and producing a contraction of the vessels. Another characteristic feature is that the tension of the eye-ball is slightly

diminished—a most important feature, too, and valuable in cases where it is necessary to dilate the pupil without endangering the eye by exciting an increase in the intra-ocular tension. The physiological action of retarding the circulation will explain this phenomenon, according to the theory of increased ocular tension, as advanced by Stellwag, who claims that the elevation in tension is not due to an increase in secretion, but directly to the increase of blood-pressure in the vessels of the interior of the eye.

I have used this alkaloid for the past two years in refraction work in my private practice and at the dispensary of the Hahnemann Hospital, as well as at the Harper Memorial Hospital, with the most gratifying results. During this time there have been over 1500 cases under observation, and in no single instance has there ever been detected the slightest inconvenience or suffering other than that to be expected from one with the accommodation of the eye paralyzed. Yet, notwithstanding this apparently brilliant success, it is not my intention to have you understand that it is not a powerful drug, and one which, unless used intelligently, may produce very serious consequences.

My attention has been called to two cases where the effects of the drug threatened considerable danger. One of these cases was reported to me by Dr. Geo. W. Stewart, which occurred at St. Luke's Homœopathic Hospital.

It was that of a man past middle life, whose home surroundings were probably not strictly hygienic, and who may have been dissipated or badly nourished. The drug had been used at his home, and when he came to the dispensary he presented a class of symptoms simulating thermic fever, with a temperature of 103° ; prostration, a rapid and feeble pulse, and complained of fulness in the head with nausea, the whole indicating a diseased organization, characterized by an extremely low state of vitality.

In the other case, the drug was used by one of my colleagues in so strong a solution as to produce some of the pathological effects, such as headache, dizziness, tinnitus aurium, and some motor symptoms, such as awkwardness of movement in walking. She had some difficulty in piloting herself around, and as she afterwards told her physician, "I

got home all right, but really don't know how, as I was so bewildered I scarcely knew where I was."

These two cases are the only ones which have come to my attention where there has been the slightest inconvenience from its use.

In a case of my own a diametrically different result was obtained, showing the susceptibility of the drug in advanced life. It was a patient 70 years of age, who presented total blindness, due to an opacity of the lens, with a complete posterior synechia.

To make a careful examination I endeavored to dilate the pupil, using cocaine and homatropine, without getting the least effect. Fearing to use atropine, I employed a solution of scopolamine, gr. 8 to 5j., instilling it every ten minutes for one hour, without causing the slightest physiological action, not even producing a giddiness, the most common and frequent effect.

In using this drug in refraction work it was not done empirically, but its actions and effects were first carefully studied.

For this purpose fifty cases were utilized. These cases were not selected as to eligibility, but were taken indiscriminately, paying no attention to age, sex or occupation.

On summarizing, the ages were found to range from 9 to 52 years, the female sex to predominate, and the occupations of such a character as you are generally called on to attend in a well-conducted dispensary.

The method adopted in all of these cases was to instil one drop of a solution, the strength of which was one-tenth of one per cent.

A single instillation of one drop was found sufficient. As the cases were under observation, a spasmodic closure of the lids could be prevented, and the full drug action could be obtained.

It was observed in these cases that the pupil began to dilate almost immediately, or as soon as the drug was absorbed, that is in from two to three minutes, reaching its maximum dilatation in from ten to twenty-four minutes, an average of thirteen minutes for the whole number of cases. The total paralyzation of the accommodation occurred in from fifteen to forty-five minutes, an average of twenty-six and a half minutes.

The normal amount of accommodation in these cases did not

materially influence the action of the drug. Some of the younger subjects, with full and strong accommodation, responded more promptly than older ones, who had reached the time in life to have one or two dioptries of presbyopia.

The effect began to diminish after twenty-four hours. During that length of time the accommodation was completely under the control of the drug action. It required from thirty-six to ninety-six hours before relaxation was complete, or until Jaeger No. 1 type could be read at a distance of twelve inches. By that time the pupil was fully contracted to its normal calibre and reacted to light stimulus.

It was an average of forty-eight hours for the whole number of cases.

This, to be sure, is about twice as long as homatropine controls the accommodation, about one-third the time of atropine, and one-half the time of hyoscine, in the strength and manner that these drugs are generally used.

It will be observed that the dilator iridis is first affected, and the maximum dilatation of the pupil is attained long before the ciliary muscle is much affected.

The dilatation of the pupil is a complete one, even more intense than with the other mydriatics.

By way of demonstration, if cocaine is instilled into an eye the pupil of which is dilated by atropine, the dilatation increases somewhat, in consequence of the anæmia of the iris which then ensues. Such an increase in the dilatation is not obtained if the pupil has been dilated with scopolamine.

From my experience with this drug it possesses many advantages which ought to commend it to our most careful consideration, especially in refraction work.

In the first place, its convenience in applying, a single instillation of a very weak preparation of it being sufficient and efficacious.

Second. Its rapidity of action in the majority of cases; the full effect and complete paralysis of accommodation will be obtained in half an hour.

Third. The convenience, enabling you to apply it while the patient waits in your office. You can thus make not only the preliminary, but a thorough examination, with the accommodation paralyzed, at a single visit.

This is a very important matter with persons who consult you from a distance.

Fourth. The condition as well as the appearance of the eye. Instead of having a congested, reddened and swollen conjunctiva, you will have a pale, anæmic or normal condition.

Fifth. The safety. The danger of exciting an increase in the intra-ocular tension is much less, at all events, than with any of the other mydriatics.

This is particularly valuable in cases where there is a predisposition to glaucoma.

As I have already stated, my practical personal experience with this drug covers a period of over two years, and a total of more than 1,500 cases.

PLACENTA PRÆVIA

BY J. D. BURNS, M.D., GRUNDY CENTER, IOWA.

(Read before the Hahnemann Medical Association of Iowa.)

My excuse for presenting a paper on this old subject, if excuse be necessary, is, first, that I am deeply impressed with the great responsibility resting on the attending physician. Second, the urgent endorsement of hot-water lavage, after emptying the womb, as a most powerful means of producing energetic uterine contractions, thereby stopping hæmorrhage, besides cleansing the cavity of the womb of fragmentary particles of the placenta and clots, which in turn lessens the danger of post-partum complications.

In looking over the statistics I find that the mortality in placenta prævia is 40 per cent. at the present time, which is an improvement of 20 per cent. over twenty-five years ago. That two out of three cases prove fatal in placenta prævia centralis and one in six in placenta prævia partialis. That two out of three women die just after or within a few hours after delivery, and that two out of three children are born dead.

These alarming statements places the mortality alongside that of cholera, smallpox, typhus fever and diphtheria, and should awaken the widest interest among physicians, especially

when, as it is considered to-day, they hold the lives of their patients in their own hands, largely, when life or death depends on the management of the case almost entirely.

“It is said to be placenta prævia when the placenta occupies that portion of the uterus which is subject to distention during labor, or, in other words, the spherical surface of the lower portion of the uterus.

“*Varieties.*—1. Placenta prævia centralis, where, after the dilatation of the os internum has become complete, the placenta *only* can be felt. 2. Placenta prævia partialis, where, with dilated os, there is recognizable a portion of the membranes, as well as a segment of the placenta. 3. Placenta prævia lateralis or marginalis, where the placental border stretches down to, but not beyond, the margin of the inner cervical ring.”

I consider it very necessary for the accoucheur to bear these varieties in mind, as it is an important index to the diagnosis, and especially the treatment, in each individual case.

Etiology.—The causes of placenta prævia are unknown. The proportion of multiparæ to primiparæ is very large (6 : 1), and, by some, doubt is entertained as to whether it ever happens in primiparæ; at all events, it is agreed by all that it is found most frequent in women who have borne children with great rapidity and in pregnancies shortly following abortions, conditions which favor relaxation of the uterine walls, dilatation of the cavity and defective development of the decidua. The theory has been advanced that the descent of the ovum is effected by contractions of the uterus soon after conception, the contraction being due to the stimulus of conception; it is therefore a partial abortion begun at an early period of gestation, but accidentally arrested at the lower uterine segment to which the villi attach themselves.

Diagnosis.—There are no signs by which placenta prævia can be recognized during the first half of pregnancy. The first signal given is the more or less profuse gush of bright-red blood from the vagina, unaccompanied by any pain: this may occur at any time after the fifth month of pregnancy, but usually in the last six or eight weeks of gestation. The earlier it occurs after the fifth month the more likely it is that the placenta is centrally located, and to be known as placenta prævia centralis, and should always be regarded with suspicion,

more especially if it occur without ostensible cause and without warning. Upon digital exploration in placenta prævia the cervix is soft, and usually the canal will permit the passage of the finger as far as the os internum, which, if the hæmorrhage be slight, will be found to offer some resistance, but will yield to gentle force; but if the hæmorrhage be profuse the os will be found patulous and dilated to the size of the canal, when, pressing the finger gently through, the placenta can readily be felt, its spongy, granular texture serving to make it easy of recognition and rendering the diagnosis certain.

Prognosis.—If the statistics I have already given be reliable, the prognosis in placenta prævia is extremely unfavorable, and to trifle with such cases is the best way to maintain the present mournful statistics. One author says: "It is impossible to analyze the statistics of placenta prævia without coming to the conclusion that the result depends in a large measure upon the personal qualities of the physician. A self-possessed man, cool, resolute, with clear ideas of the anatomical conditions to be dealt with, will, if summoned in season, apparently deprive even placenta prævia of a good share of its terrors."

If this be true the responsibility rests with the physician, and the life of the patient depends upon his promptly meeting the emergency by manual interference with intelligence and resolution.

Clinical Features.—Fortunately placenta prævia is of rare occurrence, variously estimated at one in every 750 to 1000 pregnancies. The chief clinical importance of placenta prævia results from the mode of its detachment during labor. In normal positions the separation of the placenta occurs after the fœtus has been expelled and by virtue of uterine contractions. In placenta prævia the separation is due not to contractions, but to the stretching to which the lower uterine zone is subjected to accomplish the dilatation of the os and the conversion of the half-zone into a cylindrical canal to admit the passage of the child.

Not every case of hæmorrhage is fatal or followed by labor, but some cases may be fatal before labor begins unless artificially and forcibly induced. A first hæmorrhage may not be profuse enough to endanger either mother or child; it is to be taken, however, as nature's danger signal, warning the alert

physician that a second hæmorrhage may occur at any time and in such amount that not alone will the child probably die before delivery, but that the woman as well will be seriously endangered. A profuse hæmorrhage occurring before the seventh month should, I believe, always mean prompt delivery, because hæmorrhage at that time means that the placenta is centrally located, or so nearly so that it will make no difference in the outcome; as the growth, in size, of the womb after the sixth month is almost entirely at the expense of the neck, it is certain that a second hæmorrhage will follow before term. The chances are against the child from the start, and the longer the delivery is delayed the fewer become the chances for the mother.

It has been tersely said that "there is no safety for the mother so long as pregnancy exists. Even though the first hæmorrhage be slight it is wise for the physician to proceed to delivery, for the next hæmorrhage may be fatal; we cannot tell the time or the extent of its occurrence, and when it does occur, all, perhaps, that we shall have an opportunity of doing will be to regret that we did not act when we had the chance." (Barnes.)

Treatment.—Most authorities of the past advise, in the presence of hæmorrhage of advanced pregnancies, that the physician maintain an attitude of expectancy, postponing active interference, except in cases where the loss of blood assumes alarming proportion, until the spontaneous advent of labor; but the consensus of opinion of the best authors of to-day is that the wisdom of delay is questionable.

Lusk says: "The fatality of placenta prævia is due not so much to the impotence of obstetrical art as to the losses of blood which occur suddenly in the absence of professional assistance." I would add to this statement the unwisdom of delay or waiting for something to happen. It is estimated that the danger lessens in direct proportion as the location of the placenta varies from the central variety. There may be little or no danger from the marginal form, if the dilatation is prompt and the "pains" active; but there *may be* danger, under different circumstances, in any of the varieties, and the physician is the sole judge in the case. It is for him to decide the question, What shall be done? Deliver at once or wait? This is sometimes a hard question to answer. If I wait, what do I wait for? The only answer which I know of is: To see if the hæmorrhage

will not stop and the patient go on to full term, and thus enhance the chances of saving the child, or waiting and hoping for the spontaneous advent of labor.

This might be justifiable if it is decided that it is a case of the lateral or marginal variety and the hæmorrhage is slight. (Just here the points I have alluded to previously on diagnosis show how essential they are.) But even then there is room for your making a mistake which may cost the would-be mother her life, because I believe it is true that there is no certainty in the judgment of any man as to what may happen in a case of placenta prævia, only that it is very certain the patient will die if left to herself unaided.

In hospital practice, where the patient is under constant surveillance, the expectant method may be justifiably adopted, but in general practice it is unwise, and, as I believe, unjustifiable. Therefore it is not only the safest plan, but it is the duty of the physician to proceed to deliver at once.

Of course, all cases are not urgent in the same degree, when the physician is called, but time is the only requisite to bring the majority of cases to the same urgent condition. Some may give time for thorough preparation, while others may only give time to bare the arm.

I shall not trespass on your time to discuss the mode or technique of the induction of premature labor, as a great deal depends on the case in hand, and reliable guides can be found in any work on obstetrics, only to say that in cases of central placenta prævia do not try to find the border of the placenta, but pierce it straight through and deliver by version. I shall not discuss medication at all, as I consider it a waste of time previous to emptying the womb. After the womb is emptied the prompt and copious injection of water, as hot as can be borne, offers the best possible chance of saving the woman's life, in my judgment. I do not care whether the water contains corrosive sub. in it or not, so that it is clean water. I have never used a parasiticide at such times, because I did not believe there were any parasites there to be killed, and I have never had cause to regret their non-use.

This treatment may be aided by a dose or two of twenty drops of normal liquid ergot or any other indicated remedy in *hot water*, as soon as the womb is emptied, *but not before*.

In illustration I wish to report the following case: At daylight on the morning of September 4, 1895, I was called to a case seven miles in the country. On arriving at the house I found a lady, æt. 25 years, of robust constitution, whom I had delivered of a child on the 7th of November previous. I found the bed soaked with blood and dripping on the floor underneath; two sheets in the bed were soaked dripping-full, the patient looking pale and wan and very restless. A few questions elicited the fact that menstruation had been regular every month after her previous confinement, notwithstanding she nursed the child up to the time pregnancy again begun, and which had just passed the sixth month; that she had enjoyed her usual good health all along; had slept soundly all night, and at 4 o'clock this morning she had arisen to pass water. While so doing a sudden gush of bright-red blood from the vagina filled the vessel half full. She immediately returned to bed and sent for me in haste. Upon digital examination I found the vagina filled with clotted blood, the os large enough to admit the tip of the finger. Gently pressing through the os, I could feel the placenta; from its granular, spongy feel and the pulsating cords, of which I could discover three, together with the early date of the hæmorrhage, I diagnosed central placenta prævia. I withdrew my hand to prepare for the ordeal. As breakfast was ready, she asked me if she could eat something. I told her she could drink a half cup of hot coffee. The coffee was brought and she drank it without raising her head from the pillow. I sat beside the bed watching her and thinking of, as well as dreading, the job before me, when all at once the coffee was forcibly ejected from the stomach, and in a moment a deathly pallor spread over her face, her eyes staring and glassy. I seized the pulse; it flickered a few times and stopped. I threw off my coat and vest, stripped up my sleeve, douched my hand in a basin of water in which I had washed my hands only a minute or two before, and without any preliminaries introduced my hand into the vagina. Her eyes were still glassy and her lips bluish-grey and motionless. I crowded my fore-finger through the os, then a second, then the thumb additional, and forcibly dilated the os. By this time the patient had rallied sufficient to scream that I was killing her, which brought her mother from the

kitchen, and demanded to know what I was doing and a peremptory order to stop in the same breath. (She had not seen what had transpired since she took the cup back to the kitchen.) I replied to her that I had not the time just then to talk or to explain, but requested that she heat a kettle of water as soon as possible, if there was none heated already, and prepare a syringe. Luckily there were both at hand. I worked the fingers into the placenta, finally piercing it. I found a head presentation. I went on after the feet, and, grasping both, the version and delivery was a short job. Re-inserting the hand I scooped out the contents, placenta and clots, from the womb, and with my other hand on the outside grasping the womb, held it till the syringe and hot water were brought, when a stream was directed into the womb. She was still pulseless at the wrist, but in a short time I could feel the womb contract and see the pallor of the face give way. Soon the womb was firmly contracted, the pulse returned to the wrist, and her eyes lost the stare of death; but not until more than a gallon of water had been used. Two twenty-drop doses of normal liquid ergot, in hot water, were at short intervals given, the first just as the child was delivered. All this required but twenty minutes' time from the time I began operations.

In this case only prompt and decisive measures saved the patient's life; a delay of a very few minutes would have been fatal. Indeed, I thought she was gone, but it is my belief that the pain caused by the vigorous dilatation of the os tided her over for the time. I also firmly believe that without the free use of the hot water she would never have rallied. The womb would not have remained contracted even if the ergot had produced a temporary contraction, which, without the stimulus given by the heat, I doubt if it would have occurred at all, and notwithstanding delivery and the hæmorrhage stopped, she would have been lost, as is the case in a large percentage of the fatalities in placenta prævia. She made a complete and rapid recovery under *arnica* and *china*. I would therefore emphasize and urge prompt delivery and the use of hot-water lavage in all similar cases and conditions as the best means of saving the patient's life.

APHONIA FOLLOWING TYPHOID FEVER.

BY E. C. BLACKBURN, M.D., HUNTINGDON, PA.

(Read before the Homœopathic Medical Society of Central Pennsylvania.)

ON March of this year I was called to see a boy, aged 13 years, of whom the following history was given: For a week or more there had been headache, anorexia, general aching, constipation, etc. He was walking around the house, and when interrogated answers came immediately and with an effort, showing conclusively a disturbed condition of the senses. The patient was put to bed, and upon careful examination the typical signs of typhoid were elicited. The temperature at this time was 103.7° F. The disease ran rather a severe course.

The temperature reached 105.6° for two or three days. During the latter part of the third week of the disease it was noticed that the patient had ceased to articulate, but thinking this only due to the general weakened condition, but little note was taken of the symptom. The temperature became normal on the twenty-seventh day, and remained so without any fluctuation. The speech did not return, but while the patient was very much emaciated, his appetite began to improve and he was perfectly rational. Swallowing was somewhat difficult. The patient gradually improved in health, and on May 7th (six weeks after the temperature became normal) his voice was suddenly restored, and he is now going around the house. During the disease the following drugs were used: *Bryonia*, *rhus*, *baptisia*, *causticum* and *strychnia sulph.* Galvanism was applied to the laryngeal region after fever subsided.

This case is reported, first, because of its rarity; second, to show that aphonia may follow typhoid.

SECALE is indicated in collapse with coldness and intolerance of heat, soreness of the body, dry flesh, tending to putrefy. Universal aversion to external heat, with a sense of internal burning, often with unnatural appetite and thirst, but with perfectly clear mind. Aggravation from all preparations of cinchona.

MEDICINAL AND SURGICAL ASPECTS OF ANÆMIA.

BY W. H. PIERSON, M.D., BROOKLYN, N. Y.,

Surgeon to Brooklyn Homœopathic Hospital.

(Read before the Kings County Homœopathic Medical Society, March 2, 1897.)

IN calling the attention of the members of the Society to this subject, I do not do so with the intention of submitting for their criticism an original idea or prescription, but to those who are confronted with the vexatious question, "How can I best prepare my anæmic and exsanguine patient for the anæsthetic for a surgical operation when such a condition is due either to traumatism, organic or functional disturbances?" I desire to present for perusal a series of facts gained by observation and experience, and trust such facts may prove both interesting and instructive to my younger professional friends who have, perhaps, encountered and been accustomed to treat medicinally and surgically such cases that have presented a clinical picture differing in many material results, which at times seem epidemic in character, especially during the recent years, since the visitation of the grip and its varied sequelæ. While anæmia and chlorosis seem to be truly periodically epidemic, they must be due to some known or unknown pre-existing cause, of a specific influence, that is often puzzling to the general practitioner, for such a case may not accord with his or her previous experience, as they are frequently ushered in by an *apparently* unknown cause. Cases that present themselves for operation are oftentimes in such a physical condition as to greatly embarrass an operation by such as anæmia or chlorosis, either due to traumatism, organic or functional derangements. Pulmonary tuberculosis is frequently an obstacle to an operation, which, if performed and the tumor removed, would prolong the life of an unfortunate patient, yet the depleted system will not even permit of anæsthesia, to say nothing of an abdominal operation.

First.—If we can place our patient in comfortable sanitary surroundings, where pleasure and comfort are combined with regular but not fatiguing exercise in the open air. Gymnastics,

horseback riding, walking, swimming and similar exercises, all have advantages as adjuncts to the treatment of anæmia and its allied diseases. The judicious use of the bicycle, with the handle-bars well raised to prevent the stooping position, may prove beneficial. Violent exercise predisposes to hypertrophy of the heart, whether taken on the wheel, on horseback, or walking. Exercise and its character should be accurately prescribed and applied with reasonable regard as to causation of the anæmic condition.

Sponge bathing, followed by gentle friction daily, under the supervision of a trustworthy nurse, noting duration and temperature on bath, avoiding the so-called medicated soaps, many of which are worse than useless; cold sea-bathing in chlorotic and anæmic cases is contraindicated, at least for some time after exposure to the sea atmosphere; then they should never bathe fasting, and should not take the plunge daily, the bath never lasting longer than five or ten minutes. The hot and cold alternate baths have been highly recommended, and are still advocated by many of our prominent practitioners, who consider them *par excellence*; to such as present faulty circulation they are efficacious. It has been demonstrated by experiments that hot water enhances the potency of antiseptic substances, and physiological researches confirm my statements. For illustration, we have repeatedly observed how bathing with hot water alleviates pain and limits the inflammatory process. It would take too long to deal exhaustively with the numerous medicated baths, so I confine my attention to simply heat and cold.

Second.—Absolute freedom of pressure of clothing, especially that constricting the chest and abdomen, thus allowing uninterrupted circulation and respiration. Uniform weight of underwear, with additional weight to the outer garments as the temperature demands.

Third.—Diet.—To the fairly healthy person who can supply himself with the food desired, the demand of the appetite affords the truest guide for both quantity and quality. A mixed *régime* of animal and vegetable foods is the natural diet for man. To our anæmic cases we recommend that representing the most nourishment, such as milk, bread, beef, mutton and fowl; in fact, any containing a large percentage of albumin; of

the vegetables, spinach, lettuce, celery, potatoes and sweet fruits in abundance. It is quite impossible to give iron-clad rules as to what and when food should be taken; the peculiarity of the individual must be self-demonstrated, which rule will also apply to drinks and seasons of the year.

These few general suggestions will apply to anæmia from the medical standpoint. The exsanguine variety, such as may follow hæmorrhages, also capital operations, as in accidents necessitating amputation where the loss of blood is alarming, although bearing a close relation, is not identical in causation, and differing somewhat in treatment, also may be called transitory in character. I ask, is it not sometimes a difficult task to combat and compensate for this loss, which is often called shock, when it is nothing more than a depleted system from loss of blood?

Among the foods were not mentioned the animal extracts, as well as the many so-called tonics, which I choose to classify as foods. How frequently are we called upon to apply quinine in appreciable doses to our rapidly-declining patients, when our china and arsenicum refuse to respond? The great and primary indication for quinine is a history of malarial origin, with a fever of more or less persistency. This, like many other valuable remedies, although curative agents of the primary cause, are often unsatisfactory in the completion of recovery and do not remove the effect. Preparations of iron are of invaluable assistance. Among the most prominent may be cited: Hensel's Tonicum, Liquor Ferro-Mang. (Dietrich), Ferratin, Bland's Pills, and the admirable preparation known as Gude's Pepto-Mangan. The equivalent of iron annually fed to people in the United States might be fairly stated to equip a small foundry, although the paramount difficulty with it and its preparations has been to establish proper assimilation, as its reputed tonic properties are to carry oxygen to all parts of the system. During the last decade many efforts to combine iron and manganese have met with failure. The almost insurmountable difficulty has been to properly free the inorganic metal salts that produce both stomach and bowel disturbances, thus excluding this food-medicine from our category of tonics. It is stated by a well-known writer that iron as a rule appears quite useless in the majority of these cases, and further

states that he has frequently seen the percentage of red-blood corpuscles gradually diminish during its administration, and very materially increase when arsenic was employed. Phosphate of iron will many times appear to be indicated to repair the loss caused by long sickness or following an operation. The apparent difficulty is to properly compensate the system for its loss of oxygen and other ingredients making up the red-blood corpuscles. To this end my experience and observation have led me to rely upon the preparation of iron and manganese known as Gude's Pepto-Mangan. To properly introduce this preparation into the system means more red blood—it does not absolutely depend upon the diminished accretion or the increased elimination of calcium salts, for it is plainly manifest that the effort is primarily to convert the abnormal combination to the normal for the proper support of the body and its organs. With the various preparations of iron, experimentally employed, through some years of clinical observation, I am convinced of the efficacy of Pepto-Mangan (Gude), which is a unique and prepotent digestive agent, is also prompt, reliable and pleasant, and possesses the elements necessary for the production of red blood, which has been fully demonstrated by clinical tests in the various forms of anæmias, which must appeal to the intelligence of the thoughtful physician and surgeon as essential in the successful treatment of this class of cases. I beg to narrate one or two cases of the many where this preparation was employed previous to and following operations.

Maggie M.; age 30; married, but divorced from her husband; presented a very anæmic appearance, thready pulse, murmurs of the heart and jugular, loss of appetite, and complaining of great pain in the right illiac fossa, which upon examination revealed a cystic tumor as large as a child's head. The urine was found to contain granular casts and a quantity of albumin. I called a consultation, and it was deemed advisable not to attempt an operation upon the woman in this condition, as she would certainly die on the table. I prescribed Gude's Pepto-Mangan, dr. two, in sherry, four times daily, and in one month her condition had improved so that I operated and removed the tumor, and in thirty days had the pleasure of discharging my patient, fully recovered.

CASE II.—Nellie M.; age 36; family history good, with the

exception of one brother died of acute phthisis, following pneumonia. First menstruated at thirteen years, and was regular until sixteen years, when she had scarlet fever. From this time her menses were erratic and always accompanied with great pain, more especially in the left ovarian region. One day she was thoroughly drenched by being exposed to a rain storm during the menstrual period, and did not again menstruate for a long time—she estimated about four years. Her appearance was decidedly anæmic, great depression in spirits, and wished for death to end her sufferings. Her case was diagnosed as a hydro-salpinx, and an operation agreed to as soon as her condition would warrant. She was placed upon Gude's Pepto-Mangan, with absolute inactivity for two months, when an operation was performed, which proved to be an hæmatosa salpinx. Her recovery was uneventful, although necessarily slow, owing to her emaciated condition. I am pleased to report her now in good health and menstruating regularly.

ACUTE UTERINE INVERSION—A CASE WITH NOTES.

BY M. R. FAULKNER, M.D., VINELAND, N. J.

I WAS called on, September 7, 1896, at 3.30 P.M., to attend Mrs. W. G., primipara, age 24, large frame, strong and full-blooded. Examined; found presentation vertex; position, L. O. A., with dilatation. Made preparations and watched progress until 6.15, then left until 8.15. Upon return examined and found progress good, dilatation almost complete. At 8.40, while in the adjoining room, was summoned by the woman, crying, "Oh, doctor! the waters have broken." Hastened to the bedside just in time to receive a well-developed vigorous baby-girl, weight ten and one-quarter pounds, with a very short cord, measuring eight inches. Watched for pulsation to cease, and tied off cord, disposed off baby, and endeavored to express placenta by method of Crede, but the uterine fundus was *non est*. The manipulation and consequent stimulation caused the placenta to pop out, followed by a great gush of blood. Attempted to examine, but examining hand was blocked by a mass, which I decided was the inverted uterus. I at once formed a cone of right hand and dimpled centre of fundus with thumb and tip of fingers, making counter-pressure

through abdominal walls with left hand. By steady manipulation I succeeded in returning the uterus to its normal position, during the entire procedure playing a hot creolin solution over the parts. Bleeding continued quite profusely, with complete inertia of uterine walls. I continued hot creolin douche, *plus* friction of abdomen, gave ergot hypodermatically $\mathfrak{m}\text{x}$ xxx., and by the mouth $\mathfrak{5}\text{j}$., but could not get a contraction. I then sent a stream of cold water against the tissues, immediately followed by a hot creolin douche, as before. This brought about the desired results, and as there were no lacerations there was nothing more to do but clean the patient up. The recovery was uneventful, the patient to-day being rugged and strong.

This is a rare but probable complication of otherwise normal labor occurring once in 200,000. Jewett says: "In a recent study of 100 cases of inversion, Beckman found 54 occurred spontaneously, 21 after interference, and 25 causes unknown. In this series there were 14 deaths; in 2 of the cases the uterus was irreducible, in 4 the reduction was spontaneous, in 61 there was artificial reduction, and in 19 hysterectomy was performed."

The *American Text-book of Obstetrics* says: "Endeavor to restore first that portion of the uterus which came out last." As every case is an individuality, the operator must, of course, choose the plan of action best suited to the case in hand.

Where there is complete uterine inertia, I consider my plan *the plan*.

These cases are, of course, most apt to occur in young, vigorous women, and more often in primiparæ, and very apt to catch the attendant off his guard.*

MERCURIUS IN GASTRIC DERANGEMENT.—Moist tongue, or coated white or yellowish; dry, burning lips, offensive, foul and bitter taste; nausea, desire to vomit, or bilious, mucous vomiting; painful sensitiveness of the epigastrium and abdomen, especially at night, with anguish and restlessness; drowsy in the daytime, sleeplessness at night, sometimes aversion to drink. (Is frequently suitable after *bell*.)

* Lindley, in the *Medical Record* of September 3, 1896, cites a similar case.

TUBERCULAR ARTHRITIS OF THE WRIST-JOINT FOLLOWING IMPACTED COLLES'S FRACTURE.

BY WOODWARD D. CARTER, M.D., PHILADELPHIA.

(Read Before the Homœopathic Medical Society of the County of Philadelphia, March 11, 1897).

TUBERCULOSIS of the wrist-joint does not differ in form from tuberculosis of other joints. The inflammation is usually secondary, the infection being carried from some antecedent tubercular focus, and that focus need not necessarily be very great. The lesion may be so minute as to elude detection. Even on making a post-mortem examination, Senn says that primary tuberculosis of bone rarely, if ever, occurs, and König, after an enormous clinical experience, has arrived at the same conclusion.

Trauma is often given an important place in the production of joint tuberculosis, but no amount of injury can cause the affection without the presence of the essential cause—the tubercle bacillus. Trauma, therefore, only serves as an exciting cause in the production of bone-tuberculosis in persons already infected with the bacillus of tuberculosis. Fracture is rarely followed by bone-tuberculosis, even in tubercular subjects. The injury in such cases is productive of such active cell-proliferation as to hold in abeyance the pathogenic action of the bacilli which might reach the seat of injury with the extravasated blood.

The causative agent, the tubercle bacillus, may be deposited in either the bone, the synovial membrane, or the capsule and periarticular structure, most frequently the former.

The deposit of bacilli in bone causes a more or less rapid formation of granulation tissue, followed by caseation or liquefaction. The periosteum is then destroyed and the adjacent soft parts become tubercular. The extension to the synovial membrane is followed by the formation of abundant granulation tissue which soon extends to and involves the capsule and the structures outside of it. The parts become thickened, œdematous and of a gelatinous or lardaceous appearance.

Caseation and liquefaction take place, leading to abscess formation, which, following the lines of least resistance, reach the skin, resulting in sinuses.

If the process is a regenerative one caseation does not occur. The granulations may remain for a considerable time as a semi-solid mass, to finally become absorbed. The bone and periosteum become thickened and hardened. As a result of the new growth and the œdematous infiltration a marked change soon takes place in the size, shape and appearance of the articulation. The joint becomes spindle-shaped, owing to the swelling and atrophy of the muscles above and below. Pseudo fluctuation may be elicited because of the abundance of fluid in the tissues. Areas of true fluctuation may be detected after an abscess has reached the skin. Pain is slight before the true osteitis begins, but after the bone is attacked the pain becomes decided and may be very severe. The heat of the part is always increased. Deformity is a constant accompaniment. This is due to the natural tendency of the part to take the position of greatest ease, the softening and destruction of the ligaments, and muscular contractions due to reflex irritations. The skin over a tubercular abscess presents an abnormally pallid appearance until this structure has been reached by the process, when it becomes red or livid.

The diagnosis is easy or difficult according to the extent and duration of the affection; if the disease has advanced to deformity and the formation of sinuses, there can hardly be a mistake made as to the nature of the trouble. Syphilitic disease has points in common, but it is infrequent, and there usually is the history of the individual or the evidences of pre-existing specific infection to be considered. Incipient disease of the osteal variety may be very difficult to diagnose, and in some cases requires the use of certain measures in order to make a differentiation. Middeldorpf recommends the use of a short steel needle which is introduced into the centre of the tender area. Then it is advanced until a sudden loss of resistance announces the presence of a caseous focus. Inoculation experiments have also been resorted to.

The prognosis depends upon the treatment employed, the extent of the disease, and the condition of the patient. In a few cases, where the lesion is small, after recovery has taken

place, there will be little or no deformity or impairment of function. As a rule, however, destructive changes in the joint, together with the formation of adhesions, cause deformity and restriction of motion, which, at times, may be complete. Sometimes, in spite of treatment, the disease progresses so rapidly as to cause infection of other organs, miliary tuberculosis and amyloid changes.

It must also be borne in mind that after the process has been seemingly arrested, and for months or years, there may be no sign of disease, yet the joint often again becomes the seat of tubercular inflammation.

The treatment is local and constitutional. Perfect rest in the early stages is of the utmost importance. This is obtained by the use of the plaster of Paris or starch bandage, firmly, but not tightly, applied, the joint being first enveloped in a thick layer of cotton. This treatment may be continued for weeks or months.

Accumulations of fluid should be aspirated. Injections into the tubercular area of a 10 per cent. emulsion of iodoform or balsam of Peru in glycerin have been successfully used. A 10 per cent. solution of zinc chloride, 3 to 20 gtts. at a time, and a 1 per cent. solution of trichloride of iodine have met with favor. The needle-point of a Paquelin cautery introduced into the tubercular focus is advocated.

When the destructive changes cannot be arrested by the above measures, operative interference will have to be resorted to. This consists of the removal of the diseased area with chisel and sharp spoon, filling the cavity with decalcified, iodoformized bone-chips. Should this not be effective, resection, or even amputation, may be necessary.

Mr. W. A. W., aged 23 years, a strong, robust man, presented himself at the Orthopædic Dispensary of the Hahnemann Hospital on July 20, 1896, and related his history as follows: Four days previously he had fallen from a bicycle and injured his right wrist. On the following day the hand and forearm became very much swollen and painful. He treated the injured member himself with the usual applications of iodine, salves, etc. A history of syphilis was also obtained, the initial sore occurring four years before. Thorough specific treatment had been instituted for this, and he had every reason to believe

a cure had been effected. On examination, the hand and forearm were found to be swollen and œdematous. The pain was intense, especially at the radiocarpal articulation, every movement, even of the fingers, causing intense pain. The lower end of the radius was thickened. Impacted Colles's fracture was diagnosed. An attempt was made to break up the impaction, without success. He received daily treatment until July 29th, when we lost sight of him. On December 14th he again presented himself for treatment, and gave the following history: On September 1st he had been admitted to the Philadelphia Hospital. The arm remained swollen for some time, when it gradually decreased, leaving an enlargement about the wrist-joint, which continued painful. After ten weeks an incision was made into the joint, and the bone curetted. The incision healed in two weeks.

The wrist is now broadened and thickened. The dorsal surface presents a spindle-shaped swelling, reaching from the carpal bones to a distance of three inches up the forearm. The tissues are softened and boggy. The skin over the dorsal surface is glazed and pale, but over the palmar surface is an area the size of a silver dollar, over which the skin is livid. This area gives a sense of fluctuation, showing the presence of an abscess. The hand is markedly displaced toward the ulna side. A diagnosis of tubercular arthritis was made. Such a diagnosis could have been made without difficulty had not the previous history of syphilis put us on our guard against the conditions being a gummatous deposit. We base our differential diagnosis upon the following points: Syphilis attacks most frequently the periosteum, and usually the centre of long bones. There is usually some manifestation of other tertiary lesions. Syphilitic gummata show no tendency to spontaneous disintegration. Tuberculosis is found most frequently in the epiphysis of long bones, seldom as a primary periosteal affection. The growth has the characteristic spindle-shaped appearance, and deformity. It also shows the tendency of tubercular deposits to disintegration and pus formations.

Aside from the question of differential diagnosis mentioned the case is of interest because of its rarity, fractures being seldom followed by tuberculosis at the seat of injury.

ANTIMONIUM IN GASTRIC DERANGEMENT.—Indigestion, frequent hicough, loss of appetite, loathing, tongue coated or covered with blisters, dry mouth; or, accumulation of saliva and mucus in the mouth, thirst at night, nausea, desire to vomit, increased by drinking wine; *eructations smelling and tasting of the ingesta*, or with a fetid smell; vomiting of the ingesta or of slimy and bilious substances, painfulness of the stomach to touch, flatulence, colic, diarrhœa or constipation, dull headache.

THERAPEUTICS IN ANIMAL PARASITIC SKIN DISEASES.

BY J. A. FISCHER, M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society, County of Philadelphia, Nov. 21, 1896.)

THE type of parasitic skin diseases that mostly come under our observation are pediculosis and scabies. Of the former there are the three varieties, capitis, corporis and pubis respectively.

These diseases, as their names imply, are caused by animal parasites, which inhabit the skin and its appendages and there rapidly multiply—hence, purely a local disease.

The symptoms are chiefly itching and the attending inflammation, which vary in intensity as to the individual and the extent of the lesion.

Of the pediculi, the head-louse is the most common. It is found chiefly in children of the poorer classes. It is, however, quite common among women, but rarely found among the better classes, differing in this respect from scabies. The pediculi are found all over the head, especially about the occipital region, where the hair is thickest. Ordinarily the itching of pediculosis is but slight, the patient scratching just long enough to disturb the pediculi.

Pediculosis ultimately produces impetiginous lesions, which develop not only about the scalp, but about the neck, arms and hands.

Many authors are of the opinion that impetiginous lesions confined to the occipital region are diagnostic of pediculosis.

Most patients are ignorant of the fact that they have pediculosis until they discover this eruption, for which they usually seek treatment.

In severe and long-continued cases the occipital glands become enlarged and oftentimes suppurate.

It is by no means an easy matter to find the parasite in many cases, but the nits are usually very conspicuous and plentiful.

The pediculus corporis, or body-louse, is much larger than that found on the scalp. It lives on the clothes, and is only found on the skin when in search of food.

This insect inserts its sucking apparatus into the skin and draws blood from the follicles; this then leaves the hemorrhagic specks which are said to be characteristic of the body-louse.

The subjective symptoms are burning and itching, which is always worse at night. The patient scratches, producing long excoriations, three or four tracks running in almost parallel directions. These excoriations, upon healing, leave brown streaks of pigmentation. The chief seats for the pediculi are where the clothing is habitually in closest contact with the body, although they may exist all over. Its hosts are the aged and the dirty, the half-starved and cachectic. This disease, like other parasitic diseases, is only acquired by the transference of the parasite or its ova from one individual to another.

The pediculus pubis, or crab-louse, is found on all hairy parts of the body except the scalp; it commonly attacks the pubic region. This louse also causes intense itching and a papular eruption which, if left alone, will pass into an eczema. The pediculi deposits its nits on the hair-shafts close to the skin, as does the head-louse.

In the treatment of these diseases three things are essential: 1st, The killing of the lice; 2d, Destroying and removing the nits; 3d, To cure the lesions caused by the injury which the louse and patient do to that portion of the body which they invade.

The preparations used to kill the parasites are far too numerous to mention. I will simply pick out those which have been most useful in the skin department of our dispensary for the head-louse before the impetigo has developed. An infusion of tobacco-stems applied to the hair of the scalp twice daily for two or three days will destroy the parasite and its ova. If, however, there are extensive skin lesions, this should not be used, for fear of absorption. In this case, powdered staphiagria should be used. After the parasites are destroyed, a solution of acetic acid or simple vinegar may be used to remove the nits.

Kerosene oil will kill the parasite and its ova. It should be applied to the scalp and left on for twenty-four hours, after which time the scalp is thoroughly cleansed with warm water and soap.

Internally, for the impetiginous lesions, *viola tricolor*, 6x, *hepar sulphur* and *oleander* may be resorted to.

In the body-louse, cleanliness is all that is required in most cases. The patient should bath freely and change the clothing frequently. The clothing should either be boiled or placed in an oven and baked at a temperature of 212° .

For the crab-louse, ordinarily two applications of bichloride of mercury, gr. j. to alcohol \mathfrak{z} j. or vinegar, will kill the parasite and remove the nits. Another excellent preparation is

R.	Chloral hydrate,	.	.	.	.	.	.	.	\mathfrak{z} j.
	Acid carbol.,	.	.	.	.	.	.	.	\mathfrak{m} iv.
	Aqua dist,	.	.	.	.	.	.	.	\mathfrak{z} ix. M.
	Sig.								

This is applied twice a day until all the parasites are destroyed.

In scabies the lesions are quite numerous, varying anywhere from a small vesicle to a violent dermatitis.

The female acarus selects generally the thinnest parts of the skin, such as that about the axillæ, genitals, the webs of the fingers, etc. At these locations we are to look for the characteristic lesions, which with the cuniculi and scratch-marks, together with the violent nocturnal itching, make for us a pretty fair picture of scabies. This disease is transmitted by prolonged contact with infected people or objects, as in occupying the same bed, handling infected persons, tools, shaking hands, etc.

It occurs in both male and female and at any age. The dirty people are more liable to it, as the acarus has a better chance of burrowing before it is disturbed; it also occurs quite frequently among the better classes.

In the early part of the present century it was believed by Hahnemann, Hufeland, Auteurieth and others that the itch insect was simply an accompaniment of the disease, and not the cause. This probably accounts for the theory of itch suppression; that the disease is caused by the parasite can be demonstrated by their removal.

In the treatment the most important thing, and sometimes the only thing, is to get rid of the cause, *i.e.*, the parasite. This is best done by combining cleanliness with a mild parasiticide; internal remedies are of no value as long as the cause remains. Another important factor in the treatment is the hygienic instructions given the patient, so as to prevent spreading or reinfection, which oftentimes occurs if the patient is careless.

In all cases it is necessary to open the burrows. This is best done by having the patient take a hot bath; the parasiticide should then be firmly rubbed on the effected parts.

The patient should sleep with the application on all night. This should be repeated for three or four nights in succession. Linens and other garments worn by the patient should be changed frequently and immersed in boiling water.

Among the parasiticides sulphur ointment heads the list, and it is probably the one mostly used, especially by our school. This remedy is most useful in the early stage and before the disease has become general.

The Kopsia formula, which contains

R.	Betanaphthol,	.	.	.	.	.	.	.	5ij.
	Crete præp.,	.	.	.	.	.	.	.	5ij.
	Sapon virid,	.	.	.	.	.	.	.	3x.
	Adipis,	.	.	.	.	.	.	.	5ijss. M.
	Sig.								

has been the most useful one in the skin department of the Hahnemann Hospital Dispensary, it rarely requiring more than three applications of this ointment.

It has the advantage over sulphur in that it is far less irritating.

Oil of lavender and balsam of Peru are also servicable.

Hebra's ointment, consisting of

R.	Sulp. subl,	.	.	.	.	.	.	.	.
	Oil cadini,	.	.	.	.	āā	.	.	5ij.
	Crete præp.,	.	.	.	.	.	.	.	5ijss.
	Sap. virid,	.	.	.	.	.	.	.	.
	Adipis,	.	.	.	.	āā	.	.	3j. M.
	Sig.								

may be used in place of the Kopsia formula.

When the itching persists after you feel positive that the parasites are destroyed, salyc. acid v. or x. grs. to the ounce of olive oil will aid in making your patient comfortable.

Internally, for the itching, especially if worse at night, *cinnabar* is very useful. Other remedies, such as *mercurius*, *psorinum*, *croton tig.*, *sulphur*, etc., may be used according to their special indications.

EDITORIAL.

WM. H. BIGLER, A.M., M.D.

WM. W. VAN BAUN, M.D.

MEDICAL PAPERS.

THE *New York Medical Record* of May 22d, in an editorial referring to the then approaching but now past meeting of the American Medical Association, and to the great number of papers to be presented, said, "Of course many of these are merely announced as to be read, the authors never meaning to read them, even if they ever write them."

We have not compared the programme with the actual proceedings to be able to say whether in this particular instance the above assertion proved correct, but we know that it is well-founded upon the experience of the past. We know, too, that the same assertion can be made regarding many of our own meetings of societies, county and State, and even of the American Institute. We are writing this before we have had an opportunity to see the programme of the still future meeting of the Institute, and therefore cannot be considered as "personal" in any remarks which we may be led to make. We remember having seen, we cannot recall exactly where, the mysterious words "Title not yet announced," under the name of some member represented as intending to contribute a paper to the meeting of the society.

In the first place, we would say that the author who has not decided upon his subject by the time the programme is announced had better leave the paper unwritten, since it would hardly be worth presenting if he did manage to complete it. It could be at best but a hasty, undigested and indigestible production, calculated to waste valuable time in its reading and valuable money in its printing.

In the second place, how shall we characterize the announcing of a paper by title which the author (?) never means to write, or which he readily allows himself to be prevented from writing? It is an action generally condoned, it is true, but one which we cannot but think equally as dishonest as giving a promissory note without any serious intention or prospect of

meeting it when it becomes due. We laugh, indeed, at the I. O. U.'s with which Micawber was wont to ease his conscience and pay his debts while "waiting for something to turn up," but his fleeting honest intentions did not make an honest man of him, nor did they satisfy all his creditors. In allowing his name to appear as the author of a paper, the physician virtually makes a promise to write one, and we can think of no reason why such promise should be less binding upon his conscience than any other which he makes.

The question as to the utility of the many papers continually being presented to the various medical societies is, we think, still an open one. If we look through the volumes of the various *Transactions*, whose bindings adorn the shelves of our libraries, and pick out those articles in them which we consider of permanent value, and for which we would be willing to pay, if presented to us by themselves, we will realize how much useless matter is annually evoked by the persistent prodings of earnest bureau chairmen. We do find here and there a something which is worthy of being preserved, but how much more do we find that is mere repetition of cases and experiences common to hundreds of others, offering nothing new and only of value now as a means of making the author's name known, and hereafter, perhaps, as furnishing materials for Dryasdust's statistics.

He alone who has the privilege—or shall we say the duty, or task?—of wading through a score or more of journals which catch and embalm the overflowing wisdom of the medical profession, can form any conception of the exceedingly limited range of subjects treated. The handling of the subjects, too, is marked by wearisome sameness, the only relief at times being the number of titles appended to the name of the author at the head of the article.

The same thing holds good of the papers presented to the various societies. What, then, are the motives which actuate the authors? Either a desire for fame, or at least for the little advertising which their papers may bring them, or a desire not to leave their chairman in the lurch; or, finally, the idea that they have something to say which may be of benefit to their colleagues.

The ordinary avenues of advertising being closed to physi-

cians, and their increasing numbers with the consequent competition constantly making it more difficult for the individual to catch the public eye, what more natural than that any and every opportunity, legitimately offered, to have their names in print should be seized with avidity? It is well known that reputation slowly but surely percolates through the mass of the profession until it finally reaches the laity, and he who is known to his colleagues comes gradually to be known to the public. Hence the desire to appear as the author of some paper, actual or promised. Besides this, we know how often the accounts for the daily papers are compiled from the list of intentions, and not from the account of actual occurrences.

Again, a physician finds himself a member of some section without his knowledge or consent, and from that moment becomes the legitimate prey to the importunities of his conscientious chief, who naturally desires that his section should make a respectable showing, at least in the number of papers presented. The member, if he be conscientious too, feels that he has unwittingly incurred a duty which he forthwith proceeds to fulfil by writing a paper. In many instances it is a purely perfunctory work, not calculated to be of any great value to any one, is read—if the Fates are propitious—by title only, and printed in the *Transactions*.

A very small number of authors are impelled to write by the idea that they have something to say, something of truth which they have discovered or which has been revealed to them, and which they hope may be of service to their colleagues, and through them to the world. Even if their message does not prove to be all they had hoped, their motive in presenting it is always commendable, and their effort demands our respect—which cannot be said of the others.

Surely a system which fosters, or at least does not prevent, the presentation of papers of such unequal merit, cannot be regarded as an ideal one. If the true object of these conventions be mutual benefit, it can hardly be doubted that the interchange of living experience in discussion is of far more value than the presentation of individual papers, provided the discussion be properly controlled by the presiding officer. Unfortunately this control is governed too frequently by a glance at the clock, with but little reference to the subject-matter of

the discussion, and members are allowed to waste their allotted time in prosy details of irrelevant cases successfully treated by themselves, without at all furthering the true discussion.

The faults of the present system are, therefore, too many inducements to write useless papers; hence too many papers; and, finally, imperfect control of the discussions.

The remedies proposed are: 1. Let the presentation of a paper not carry with it the implied right to have it printed. The committee on publication should consist of the chairmen of the various bureaus to decide upon the papers worthy of being entered in the *Transactions* in full. This would, we think, prevent the scribbling of many so-called papers, and thus reduce the number of rejected manuscripts. 2. Let there be a limitation to the number of subjects and of papers to be presented by each section, and let all papers be presented before the full body of the society, so that each member can have the benefit, if he so desire, of all discussions; but, 3. Let the chairman of each section really act as presiding officer during the session in which his report is being considered. He, if any one, should know what is to be presented, and should be able intelligently to guide and control the discussion, so as to bring out the true work of his colleagues. If he then would be willing to allow the "bureau to be closed" as soon as those had spoken who felt that they had something to say, without an appeal to this one or that one, "from whom they would be glad to hear," and who usually can be relied upon to utter words upon any subject under heaven, much valuable time would be saved, and his fellows be spared the infliction of much inanity.

J. P. SUTHERLAND, M.D., the able and conservative editor of the *New England Medical Gazette*, has severed his connection with the Journal, the reason given being his increasing labor and responsibility in connection with the Boston University School of Medicine. Dr. Sutherland's resignation is a severe loss to homœopathic journalism. His successors are John L. Coffin, M.D., editor, and Anna T. Lovering, M.D., assistant editor.

GLEANINGS.

DIFFERENTIATION OF HYSTERIC AND EPILEPTIC ATTACKS.—Dr. Bonjour finds the differential diagnosis of these two states at times difficult, and therefore presents their characteristic features.

The Prodromal Stage.—The *aura* is rarely lacking in epilepsy; the hallucinations may make the epileptic an assassin or an incendiary. In hysteria the *aura* is of longer duration and lighter.

The “*initial cry*” in both states is always loud, yet in the epileptic it is *horrible and penetrating*. Then the epileptic becomes unconscious and falls, often injuring himself; the hysteric falls without wholly losing consciousness, and *never hurts herself*.

At the beginning of the epileptic attack the pupil *dilates*, and does not become modified under the influence of light; the face subsequently becomes terribly congested, and much saliva flows from the mouth. Hysterics only present *swelling* of the face and occasionally salivation. The epileptic turns his eyes upwards, and they move rapidly in their orbits, while the whole body is shaken by *tonic convulsions*, the skin turns cyanotic, and symptoms of asphyxia set in; the hysteric only has tonic convulsions, and the thumb is never flexed under the index finger. Clonic convulsions follow the epileptic seizure, and are violent, the patient turning, rising and falling on the bed, and falls if not held. The hysteric generally limits herself to opisthotonos, with the arms flexed and the legs extended.

Incontinence of urine and fæces, frequent in epileptics, is absent in hysterics.

In epilepsy the pulse is small, filiform, so that sometimes it cannot be counted. In hysterics it changes from one minute to the other, and is different on each side.

The epileptic attack terminates nearly always *slowly*, rarely suddenly. The patient may resume his occupation or sleep or have slight delirium. The hysteric attack usually ends brusquely; sometimes the patient is seized with a deep sleep, but suffers from hallucinations, yet never from mental alienation. With Voison, he holds that the absence of the pupillary reflex is an *exclusive characteristic of epilepsy*. Hypnotism has a striking influence in hysteria, for with a few sittings one may cause the attacks wholly to vanish.—*Rivista Clinica E Therapeutica*, No. 10, 1896.

THE MARRIAGE OF SYPHILITICS.—Dr. Lesser, in treating of this question, refers especially to the possibility of tertiary symptoms and the transmission of the disease to the wife and children.

The importance of the first feature is great, for the syphilitic with tertiary complications may leave a family without resources or even himself become a burden. Yet with diligent treatment the chances are good and tertiary accidents rare. They may be compared to those hanging over the head of one with a hereditary history of tuberculosis or cancer. With careful and

long-continued treatment the possibility of tertiary symptoms should not interdict matrimony.

The second point, of transmission to wife and children, should be considered in each sex differently, for the male and female do not react the same as to transmission of the virus. In the female, in whom all the ovules are completely formed at puberty, syphilitic infection involves *all* these, so that if she become pregnant a long time later (ten to fifteen years) impregnation of an ovule, long before infected, will probably produce a syphilitic child. But if a syphilitic male impregnate a female ten years after he has had syphilis one may be certain that the spermatozoa which he now has are *not* the same as those which were infected ten years previously. Therefore marriage should be less frequently permitted of a previously infected woman than of a syphilitic man.

As to the transmission of the disease, all depends on the contagiousness of his condition. At present there are no known signs by which one may state that such and such a syphilitic is still in a contagious stage; all that we know is that the secondary symptoms *are* contagious, while the tertiary *are not*. Clinical experience has demonstrated that with careful treatment the disease loses its contagiousness after three years. Yet as exceptions to this rule are numerous, it is better to forbid marriage in syphilitic men for five to six years. If he should present secondary symptoms during the third or fourth year of the disease, marriage should be still later deferred. In short, the patient should not have had secondary symptoms for one or two years; but if the symptoms are tertiary, the disease has lost its contagiousness.—*La Settimana Medica*, No. 40, 1896. Dr. Schuster (Aachen, Germany) has written a work on this subject: *Wann Duerfen Syphilitische Heirathen?* Dr. H. Donner, a Stuttgart homœopathic physician, has recently published an excellent work on the late forms of hereditary syphilis, with illustrative cases from his practice.

THE INFLUENCE OF MARRIAGE AND PREGNANCY ON HEART DISEASES.—Dr. Peter set up the doctrine that women with heart diseases should not marry, recapitulating it in a few explicit phrases: Girl, no marriage; married woman, no pregnancy; mother, no nursing her children. Recently Leyden has been inclined to accord with Peter in full, even going so far as to interrupt pregnancy at the first signs of failing compensation. Prof. Jaccoud (Paris), in a recent lecture, however, differs from these fundamental ideas. He suggests that one should have consideration for the aspirations of the girl, as under circumstances a refusal may be fatal. Secondly, the nature of the disease is of importance, mitral affections being more serious than aortic lesions, yet one should not be too absolute. It must be admitted that mitral lesions predispose more to cardio-pulmonary complications, dyspnœa, hæmoptysis and asystolia, while aortic defects are associated rather with cerebral conditions. He lays much stress on the precedence of symptoms of non-compensation; still, however, if they were present and were slight, yielding to proper treatment in a short time, they do not constitute a contra-indication. The social condition of the patient is also of great importance, as it is much easier if the woman can pass the greater portion of the second half of pregnancy in almost absolute rest and quiet. As to induction of abortion on appearance of broken compensation. Jaccoud expresses himself less

clearly. Tarnier and Leyden would produce it under these circumstances. Yet if one believe the statistics of Vinay, who auscultated all the women entering the Lyons Maternity during 1891-92, in heart diseases complicating pregnancy the prognosis is much less grave and the treatment much less active than is generally held. Each case should be treated by itself rather than with regard to any absolute doctrine.—*La Settimana Medica*, No. 40, 1896.

POISONING BY A PICRIC ACID SALVE IN TREATMENT FOR BURNS.—Dr. Szezypiorski relates two cases where, thirty-six hours after local application of a 5 per cent. salve of picric acid in vaseline, there was noticed slight icterus and a rubeoliform erythema which covered the whole body, together with an erythema in irregular patches, with well-marked borders, and varying from the size of a ten-cent piece to that of a fifty-cent piece. They were partially confluent, and did not disappear wholly on pressure. The urine was darkish red, the tongue coated; there was anorexia, with general malaise, so that the patients, men of twenty-eight and thirty-six years, were obliged to remain in the house for two or three days. The salve was replaced by a solution of picric acid in water and a salve of aristol in vaseline. In ten days the symptoms had wholly disappeared. One of the burns healed with astonishing rapidity, while the other cicatrized more slowly. He advises the use of the acid in burns, but rather as an aqueous solution, without addition of alcohol.—*Anales Del Circulo Medico Argentino*, No. 18, 1896.

EXTRACTION OF TEETH AND FACIAL PARALYSIS.—Dr. Frankl-Hochwart (Vienna), in not less than six cases, has observed facial paralysis to follow extraction of teeth. In all these cases he attempted to detect other causes of the lesion before ascribing it to the extraction.

In the first case, already seven years before there had been a transient facial paralysis. The latter attack had appeared the day after extraction, on the same side as the drawn tooth, and on the same side as the preceding paralysis.

The second, third and fourth cases were of complete paralysis, without any complication, appearing a few days after extraction. In these, as well as in the sixth case, the lesion followed on the same side as the tooth was extracted, while in the fifth case it was on the opposite side. In the sixth case there possibly was a predisposition-psychosis among the ascendants. The writer places no importance on the traumatism itself, but rather on the succeeding suppuration, with which the microbes are, and above all, pneumococci, which are prone to extend their action by migration. Not only may extraction with suppuration, but any injury to a tooth may, in a predisposed individual, bring about a facial paralysis. For example, a seamstress of 21 years, who broke a front tooth, without following suppuration, was seized for the third time with a complete paralysis of the facial nerve. The patient was hereditarily predisposed, and had had two attacks previously. He is inclined to think that inflammatory processes in the teeth, without extraction, may give rise to facial paralysis.—*Hospitalstidende*, No. 49, 1896. Dr. Rene Verhogen (Brussels) has recorded a case of hysteric contracture of the masseters in a boy of twelve years who, after a blow on the cheek by a companion, was unable to open his mouth.—*La Settimana Medica*, No. 17, 1896; abstr. in

the HAHNEMANNIAN MONTHLY, October, 1896. Professor Charcot, *Lecours de Mardi*, also has noted a woman who, after slapping her child, was seized with functional paralysis of the hand, with complete anæsthesia of the skin. These cases, as well as that of the seamstress mentioned, serve as illustrations of *hysteria* paralysis, with the trauma figuring as causative factors in predisposed subjects.

ARSENIC IN SCARLET FEVER.—Dr. I. Speransky claims that arsenic, which he has employed as Fowler's solution, has both a prophylactic and a curative action in scarlatina.—*La Semaine Médicale*, No. 43, 1896.

THE HOT-AIR BATH IN ALBUMINURIA.—Dr. Carrien warmly recommends the hot-air bath in albuminuria, he preferring it either to the steam or hot-water bath. Its action is more certain, while the disagreeable after-action is less pronounced. It is easily administered, for one only needs a simple alcohol lamp, from which a tube conducts the heated air in and under the bedclothes, which are to be supported by two or three hoops. The patient is well tucked in under the bedclothes, only his head being outside. For about twenty minutes he is permitted to lie in this hot-air bath of about 40° C.; this measure is repeated every third or fourth day. The physiological results are profuse perspiration, slightly accelerated pulse and an increase of the temperature of the body of 1 to 2 degrees. Only slight palpitation and headache have been noticed after the first bath as disagreeable effects. The albuminuria decreases greatly during the day following the bath, then increases, but it will not reach the degree present before the bath. The writer regards it indicated in parenchymatous nephritis, but contraindicated both in the contracted kidney and in arterio-sclerosis.—*Norsk Magazin for Lægevidenskaben*, No. 10, 1896.

SOFT CHANCER OF THE TONGUE.—Drs. Emmery and Sabourand (Paris) report the case of a laborer of twenty-five years, who entered Professor Fournier's clinic at the Hospital St. Louis with four soft chancres on his penis and a suppurating bubo in each groin; on the dorsum of his tongue there was an ulcer of 6 to 7 mms. in diameter. Inoculation with the secretion gave positive results. Both in the secretion and in the walls of the lingual ulcer the characteristic bacilli were to be detected. On both sides, under each lower jaw, suppurating buboes developed, which were opened. Fournier states this to be the first case of soft chancre of the tongue which has been demonstrated with certainty.—*Annales de Dermatologie*, p. 198, 1896.

HÆMORRHACHIS AND HÆMATOMYELIA IN PURPURA.—Dr. V. Steffen records the instructive case of a boy of five years who was seized with acute and violent purpura, with associated bleeding from the mucous membranes and the kidneys, with signs of an acute pericarditis. A week after the disease had begun a second eruption of purpura followed with cerebral symptoms, as unconsciousness, sopor, paralysis of the left facial nerve and simultaneous paralysis of both lower extremities and the sphincters. While the cerebral symptoms disappeared in a few weeks, two months after the commencement of the disease the paralysis of the legs was unchanged, with complete anæsthesia to the middle of the abdomen, abolition of the temperature sense, absent reflexes and scarcely noticeable reaction to either electric

current. The facial nerve and sphincters were still paralyzed. During the first six months of treatment he was able to sit propped up in bed and continued in good condition, but later œdema and emaciation set in, with a large-sized bed sore on the sacrum and great atrophy of both legs. Death followed about a year after.

FRANK H. PRITCHARD, M.D.

THE CIRCULAR RUBBER BANDAGE.—Dr. T. M. Bull, following the method of Dr. G. H. Fox in the use of the circular bandage, reports the cure, in three weeks' time, of a varicose ulcer of the leg, which had resisted treatment for twenty years. The dressing is applied as follows: The ulcer is protected with rubber sheeting; then circular bands of elastic webbing two or three inches wide are applied to the leg after the manner of broad garters, one above the other, and slightly overlapping. They are recommended on the ground of cleanliness, cheapness, convenience and adaptability to the needs of the average patient.—*New York Medical Journal*, April 1, 1897.

ANTHRAX ŒDEMA.—Dr. W. Page McIntosh, Louisville, Ky., reports a case of a sailor, 34 years of age, with the following symptoms: On March 23, 1895, he was admitted to the United States Marine Hospital, Boston. Three weeks previously a swelling appeared on the right side of neck which gradually spread across the front; it was the size of a large orange, tender to touch and painful. The temperature was 38.5 C. The tumor soon became œdematous, painful and red. An incision was then made, and a quantity of blood and a little pus was evacuated. A drainage-tube was inserted and hot bichloride packs applied every four hours. A portion of the blood and pus withdrawn was mounted and stained by Graue's method; this showed a quantity of bacilli presenting the characteristic morphological appearances of bacillus anthracis. The wound was then dressed frequently with peroxide of hydrogen and a 10 per cent. solution of carbolic acid.

Two days later, examination of fresh cover-slides from the deep portions of the wound discovered only a few of the bacilli, and two days later, on examination, none could be detected. The case made a rapid recovery, being discharged six weeks after admission. The source of infection was obscure. The most probable exposure was at the time when the man was employed on a vessel transporting hides from South America. This was eighteen months previously, but it is not inconsistent with the life-history of the anthrax bacillus.—*Medicine*, June, 1897.

W. D. CARTER, M.D.

THE MICROBIAL ORIGIN OF BALDNESS.—L. Wickham, M.D., reports the researches of Dr. Sabouraud, a former pupil of the Pasteur Institute, on seborrhœa, alopecia areata, the falling out of the hair and baldness. In the seborrhœic cocoon he found the whole dermatological flora studied by Unna. The following medium he found unadapted to all other microbes of the seborrhœic exudate, while it allowed the alopecia bacillus to grow:

Peptone,	20 grammes.
Glycerine,	20 grammes.
Acetic acid,	5 drops.
Water,	10.0 grammes.
Gelose,	13 grammes.

M. Sabouraud made a cultivation on a liquid medium, and having filtered it

through porcelain, inoculated the filtrate deeply under the skin and into the muscular tissues of a rabbit. The rabbit at once commenced to shed its fur, and within forty days general alopecia was established.

He concludes (1) that the microbial origin of baldness is certain; (2) that the micro-organism of baldness is the same as that of seborrhœa; (3) that it is identical with that of the seborrhœa plugs of the orifices of the follicles in alopecia areata.—Canada *Lancet*.

F. WALTER BRIERLY, M.D.

THE CHEMISTRY AND PATHOLOGY OF GOUT.—Luff, discussing this subject in the Goulstonian Lectures, reaches the following conclusions: 1. Uric acid is not normally present in the blood of man and other mammals, nor in the blood of birds. 2. Uric acid is normally produced only in the kidneys. 3. Uric acid is normally formed from urea, probably by conjugation of that substance with glycocin in the kidneys. 4. Uric acid is present in the blood in gout as the soluble sodium quadriurate. In its soluble form it is not a toxic agent. It deposits from the blood as sodium biurate, which acts passively and physically as a foreign body in the tissues or organs in which it is deposited. 5. The presence of uric acid in the blood in gout is due to its deficient excretion by the kidneys, and to the subsequent absorption of the non-excreted portion into the blood from those organs. 6. Gout is probably always preceded by some affection of the kidneys, functional or organic, which interferes with the proper excretion of uric acid. The probable seat of the kidney affection giving rise to gout is the epithelium of the convoluted tubes. 7. In certain blood diseases and disorders accompanied by leucocytosis uric acid is formed within the system from nuclein. Under such circumstances it passes at once into the blood and is rapidly eliminated by the kidneys. 8. The solubility of uric acid in the blood is not affected by a diminished alkalinity of the blood produced by the addition of organic acids. 9. The deposition of sodium biurate is not accelerated by a diminution of the alkalinity of the blood. 10. An increased alkalinity of the blood does not increase the solubility of deposits of sodium biurate. 11. The saline constituents of vegetables exercise a remarkable inhibitory power over the decomposition of sodium quadriurate. 12. The solubility of sodium biurate in the blood is increased by the presence of the saline constituents of vegetables. 13. The solubility of sodium biurate in the blood is diminished by the presence of the saline constituents of meat. 14. The gout-inducing properties of certain wines are not due to their acidity. Probably they owe their gout-inducing action to the effect they exercise on the metabolism of the liver.—*The Lancet*, April 17, 1897.

HYSTERICAL HÆMOPTYSIS.—Strümpell records a case of hysterical hæmoptysis after fracture of two ribs in a man. Three days after the accident the patient spat up some blood, and for the next three months did not leave his bed. He complained of frequent pain in the injured side, with cough and bloody expectoration. His expression was that of a melancholy hypochondriac. The cough was slight but almost continual, and had an artificial sound, as if produced by an effort for the occasion. The surface of the soft palate was stippled with tiny hæmorrhagic spots; the larynx was normal. About 15 to 30 cubic centimeters of blood-stained expectoration accumulated daily in the spittoon; it consisted chiefly of mucus containing a few white and red blood-corpuscles, which gave it a pale-reddish color, much paler than that

of rusty sputum; there was only a trace of pus, and no tubercle bacillus. The lungs and other organs were normal. There was much complaint of headache and drowsiness and other neurasthenic troubles. Treatment directed especially to the psychical condition was followed by improvement. Strümpell considers that such cases are not sufficiently recognized. The expectoration is almost always from the mouth or pharynx, or neighboring parts, and may be distinguished from true hæmoptysis by the far smaller amount of blood in it, the absence of pus elements, and the large amount of squamous epithelium, leptothrix, and food-remains present. The blood expectorated is to be attributed to the mechanical injury to the mucous membrane from the continual cough. Such hysterical hæmoptysis occurs also apart from trauma in persons of hysterical or hypochondriacal temperament.—*British Medical Journal*, March, 1897.

F. MORTIMER LAWRENCE. M.D.

SURGICAL HINTS.—The finer the needle and the finer the suture material the more perfectly can one adapt the lips of a wound, and the less noticeable will be the cicatrix.

In dealing with cancer, we must take away the new growth and a good margin of apparently healthy tissue. Then, and not till then, should we consider how to close the defect with the least amount of scarring.

Some individuals have a tendency which causes keloid degeneration in any scar, whether the wound has healed primarily or not. No precautions on the part of the surgeon can with certainty avoid this occurrence. It is wise to ascertain, by a careful examination of the patient's skin for old scars, whether or not this tendency exists, so that one may not too confidently promise a linear cicatrix.

If during an operation you should accidentally wound yourself by the prick of a needle or retractor or the scratch of a knife, you should *at once* encourage bleeding and then touch the spot with strong acetic acid. It burns rather smartly for a few moments, but the resulting scab will be soft and pliable and not easily torn off. Never cover such a wound with collodion before disinfecting it thoroughly, and do not neglect your precautions in any case, no matter how far beyond reproach may be the moral character of your patient.

Lawson Tait advises that all instruments with sliding tubes, screws or bended joints should be abandoned, every joint should be capable of being unshipped, and after every operation every instrument used should be scrubbed with raw turpentine and a brush, and then well washed with soap and water. If this be done, immersion in cold tap water for the next operation is all that is wanted.

Van Hook states that the question which arises in our minds when we approach our cases of appendicitis for operation is: How can we operate to save life? All other questions are secondary. All considerations of surgical nicety and personal satisfaction must give way. What is the main anatomic object to be accomplished by operation *when adhesions have formed*? It is to relieve by outward drainage the tension in the abscess cavity—to make a safety-valve. When this has been properly done our chief excuse for interference is exhausted. Further work in the abdomen is dangerous.

Briggs believes that enlarged glands found in the front and sides of the neck, but nowhere else, are never specific; the glands found in the back of the

neck, with the characteristics above given, are strongly suspicious of a recent infection, even where nothing else is showing at the time, and that in every case of cervical adenitis coexisting with a general lymph-adenitis, syphilis, either recent or remote, should always be considered, and only excluded after careful investigation.—*International Journal of Surgery*.

A SAFE AND COMPLETE LOCAL ANÆSTHETIC.—Williams (Philadelphia) says that for years the medical profession has been looking for a local anæsthetic to take the place of cocaine, one that should be free from its dangers and would give the patient complete loss of the sensation of pain. Schleich's fluid was introduced and extensively tried with gratifying results; in some cases, however, pain was complained of which compelled the operator to finish with ether or chloroform. Recently eucaine hydrochlorate has been introduced, and very careful observations have been made as to what was a maximum dose within safe limits and the minimum dose for complete anæsthesia.

Williams states that he has had no trouble in passing sutures, because of density of the tissue produced by eucaine. In several cases there were a number of sutures introduced and primary union in all but two. One case (fistula in ano) was curetted thoroughly and packed, and five weeks after the operation was very nearly well. Another case (epithelioma of face over malar bone about the size of a half-dollar, with ulceration) had seven sutures introduced; primary union was established; patient well in two weeks.

These cases all occurred in those who dreaded ether and chloroform, and Williams has doubts whether they would have had any operative interference had he not used eucaine.

Spencer (*University Medical Magazine*) reports twenty cases without any ill effects, and in which there was no distress in the most painful troubles.

Eucaine can be used in all superficial operations in a three or five per cent. solution, without causing density or hardening of tissue, and in sufficient amount to completely surround the part to be incised. As much as nine grains have been used without any evidence of danger. It does not inhibit or prevent primary union, but the solution should always be boiled before injecting with a thoroughly sterilized needle.—*International Journal of Surgery*.

TREATMENT OF SEPTIC PERITONITIS.—While the details of operation must necessarily vary somewhat according to the conditions found in each case, the plan of treatment employed by McCosh (New York) is in general as follows:

1. Chloroform is employed as the anæsthetic.
2. A free incision is made generally five or six inches in length. Its situation varies according to the organ which has excited the peritonitis. The purulent fluid is allowed to flow out, its escape being often aided by turning the patient on the side.
3. As a rule, the intestines are allowed to escape from the abdominal cavity into hot towels held in the hands of assistants (the patient generally being turned on the side).

In certain cases, where the distention is enormous and where the heart's action is weak, any considerable escape of the intestinal coils is prevented. Where possible, however, even at a great risk, the intestines are removed, and, if well protected by hot towels, this evisceration does not increase to any

great extent the shock of the operation. If this distention is such that their return is impossible, I do not hesitate to open the ileum and allow gas and feces to escape. These openings are closed by Lembert sutures. McCosh has never seen any reason for establishing a temporary artificial anus by suturing the gut to the abdominal wall, as has been recommended.

4. The cause of the peritonitis is removed. If it be an appendix or tumor, it is extirpated; if it be a perforation, it is sutured.

5. The intestines in the cavity of the peritonæum are thoroughly irrigated with hot, normal salt solution. If the intestines have been removed, they are thoroughly but gently washed with the contents of several two-litre flasks, as is also the abdominal cavity, at the same time a stream from a three-gallon irrigating-jar is steadily flowing into every corner and crevice of the cavity through a soft-rubber tube, which is moved around in different directions. The temperature of the solution is 110° to 112° F. If the removal of the intestines has been considered unwise, the edges of the incision in the abdominal wall are grasped by the assistant, held well up and separated to their full extent, and the cavity flooded by flaskful after flaskful of the solution at the same time that the irrigating-tube is pouring a steady stream into all pouches and recesses opened up by the hands of the operator, which are gently moved about among the intestinal coils. I have not found that much shock is caused by irrigation carried out in this manner; indeed, on the contrary, the heart's action will often be stimulated by the hot water. It is of great importance that the temperature of the water should not be below 110° F.; indeed, 112° or 114° F. is probably safer. Irrigation is preferred to the swabbing of the intestines and peritonæum by means of gauze-pads or sponges. It seems reasonable to suppose that the mechanical friction must damage to a certain extent the peritoneal endothelium, and so diminish the vitality of this serous coat and its power of resistance against infection. Of course it is not claimed that perfect cleansing is accomplished by any method. A considerable amount of the salt solution is allowed to remain in the abdominal cavity for the purpose of both stimulating the heart and of favoring intestinal drainage.

6. Sulphate of magnesia is injected, through a hollow needle attached to a large aspirating-syringe, into the small intestine—a point in the jejunum or ileum, as high up as possible, being selected. A saturated solution containing between one and two ounces of the salt is used. The needle-puncture is closed by means of a Lembert suture.

7. The peritoneal cavity is drained generally by four or more strips of sterile gauze thrust in different directions among the intestines. At times a large glass tube is also inserted into the pelvis; in other cases strips of rubber tissue are used, and recently I have employed strips of pure silk sponges instead of gauze. These appear to drain well and are easily removed, but are not so well suited to walling-off septic areas from the general peritoneal cavity. The strips of rubber-tissue are most easily removed of all, but I do not feel sure that their drainage is as effectual. Each gauze-strip is often surrounded for two or three inches at its point of exit by a cup of rubber-tissue, which facilitates its removal.

8. The abdominal wound is but partly closed by sutures. The edges are not closely approximated, but are generally partially drawn together by two or three silkworm-gut sutures, between which and the intestines is placed a compress of gauze. A wound which gaps somewhat affords freer exit for the escape of the peritoneal secretion.

9. After the return of the patient to bed, if the condition of the stomach will permit, a ten-grain dose of calomel is given. If chloroform has been used, this will generally be retained.

Rectal stimulation is employed during the first twenty-four or thirty-six hours. If there is persistent vomiting, lavage is sometimes useful.

In conclusion, McCosh emphasizes his conviction that the success in the treatment of septic peritonitis depends largely upon thorough irrigation and restoration of intestinal peristalsis.—*Annals of Surgery*.

HERBERT L. NORTHPROP, M.D.

THE USE OF CATGUT LIGATURES IN ABDOMINAL OPERATIONS.—Dr. Ostrom believes many of the unsuccessful cases of surgery, and especially of abdominal surgery, have their origin in the ligatures that remain after operation. They become encysted, constricting tissues and nerves, giving rise to more or less irritation. He has adopted catgut almost exclusively for abdominal work, and prepares it as follows: Raw gut is soaked in ether for twelve hours, then thoroughly dried; next it is placed in the following solution for thirty hours:

R.—

Bichromate of potash,	. . . . .	1½ grammes.
Carbolic acid,	. . . . .	10 “
Glycerine,	. . . . .	10 “
Water,	. . . . .	480 “

Dissolve the bichromate of potash in the water, then add the carbolic acid and glycerine.

After removing from the above solution, dry thoroughly, then boil in absolute alcohol, under pressure.

He has used catgut prepared in this way for over a year, and has yet to record the first infection from its use. The finest gut will last four or five weeks, and may be used without fear in intestinal and abdominal work.—*Medical Times*.

A SAFE AND COMPLETE LOCAL ANÆSTHETIC.—Dr. Martin H. Williams reports eight cases in which eucaine was used, and draws the following conclusions: Eucaine can be used in all superficial operations, in 3 to 5 per cent. solution, without causing hardening of tissue, and in sufficient amount to completely surround the part to be incised. Nine grains have been used without any evidence of danger. It does not inhibit primary union, but the solution should be boiled before injecting with a thoroughly sterilized needle.—*International Journal of Surgery*.

INTESTINAL ANASTOMOSIS BY THE MURPHY BUTTON.—Dr. James H. Dunn, after some experience with the various sutures, plates, and the button, concludes as follows:

(1) No other method of anastomosis can compare in rapidity and ease with that by the Murphy button. None requires so little handling of the viscera, none so conserves asepsis in handling an open intestine.

(2) A good button applied with skill is more trustworthy against leak and slip than the stitching of any surgeon, however skilful.

(3) On its separation no foreign substance is left in the tissues, and while present it does not act as a septic seton to convey infection into the tissues, as deep sutures must do,

4. The scar is but a fine line scarcely discoverable on the peritoneal surface, and with but a minimum of connective-tissue.

Two objections are suggested: (1) In a few cases the button has failed to pass; (2) Some have feared that the small opening in and the weight of the button might cause acute obstruction.—*Canada Lancet*.

F. WALTER BRIERLY, M.D.

THE TREATMENT OF HEART DISEASES DURING PREGNANCY, LABOR AND THE PUERPERAL PERIOD (Philips).—The following varieties of heart diseases may complicate pregnancy:

1. The remains of an old pericarditis and dislocation of the heart in consequence of pleuritic adhesions.

2. Myocarditis and degeneration of the heart muscle.

3. Chronic endocarditis.

4. The recurrent form of acute endocarditis.

If there are no symptoms during pregnancy of insufficiency of the heart no treatment is required except to regulate the functions of the stomach and bowels, and to avoid climbing stairs. Disturbances of compensation seldom occur before the fifth month. The therapeutics consist, then, in the use of arsenic, iron and strychnia for the heart weakness, and of a stimulant like ether for the attacks of faintness and dizziness. If there is œdema and dyspnoea, use digitalis or strophanthus, excepting in cases of insufficiency of the aorta.

The dyspnoea is less during labor if the parturient woman sits up in bed. The more severe attacks of suffocation are treated by injections of ether, and often it is necessary to rupture the membranes before the cervix is dilated. The forceps should be applied as soon as the os uteri is sufficiently dilated. Ether is the best for narcosis. A sand-bag should be laid on the abdomen during the extraction of the child, to prevent sudden filling of the abdominal vessels with blood.

The lying-in woman is still in great danger for four days after labor. Post-partum hæmorrhage has a favorable rather than an injurious effect, as it relieves the right heart, from which the threatening symptoms arise. Ergot is contraindicated on this account. Amylnitrate and subcutaneous injections of ether and strychnia act favorably.

The writer opposes the induction of abortion in severe cardiac diseases, as it does not prolong the life of the mother, who usually dies soon after the expulsion of the fetus.—*Centralblatt für Gynäkologie*, No. 5, 1897.

THE INDUCTION OF PREMATURE LABOR AND OF ABORTION BY THE INTRA-UTERINE BALLOON (Stieda).—A thick Braun's balloon and a modified Barnes-Fehling's metreurynter is thoroughly disinfected with warm water, soap, and a one to one thousand solution of corrosive sublimate, the air is pressed out, the stopcock turned, and the bags are kept under the sublimate solution. The pregnant woman is prepared by a number of warm vaginal douches and a half-hour's bath of 90 degrees. She is examined internally, and the potency of the cervical canal determined before the introduction of the balloon. The patient is placed on her back across the bed, and the vaginal portion exposed by an anterior and posterior speculum. The anterior lip of the cervix is drawn down with two bullet forceps after it has been cleansed by wads of cotton dipped in a one to one thousand solution of corrosive sublimate, and the anterior speculum is then removed. If the cervical canal is large enough,

the Braun's balloon is introduced; otherwise the thin metreurynter is used. The empty balloon is rolled together laterally, seized in the dressing forceps and passed up to the cervical canal so that it lies wholly above the internal os, and is held in place until the balloon is filled sufficiently to prevent it from slipping out. This will require over half a litre of sterile water. If there are no pains, after a few hours slight traction on the rubber tube connected with the balloon can be made by fastening it to the end of the bed and elevating the pelvis of the patient. If pains have lasted for some time, traction can be diminished or stopped. If the balloon has partly descended into the cervical canal, which can be ascertained by internal examination, it should be distended with water to the diameter of thirty-five centimeters to secure complete dilatation of the cervix. After the balloon is borne, the further care of labor depends upon the activity of the pains, the size of the os, position of the child, or the presence of complications, such as the prolapse of the cord.—*Monatsschrift für Geburtschulfe und Gynäkologie*, Bd. vi., H. 3, Mch., 1897.

THE TECHNIQUE OF DIVISION OF THE EXTERNAL OS UTERI (Rosner).—The entire philosophy of this operation consists in opening and keeping open the cervical canal (Sims). The first is not accompanied by any technical difficulty, but maintaining any considerable degree of potency of the external os is accompanied sometimes by almost insurmountable difficulties.

The fresh cut surfaces in bilateral incision of the cervix touch each other and are apt to heal again, causing a narrower canal than existed before the operation. The use of glass or rubber stems, gauge, suppositories, etc., has not helped the matter much and the operation is in no better credit than in the time of Sims.

Rosner has sought to overcome the difficulty by dissecting up a narrow tongue or flap of mucous membrane on each side of the cervix and sewing it into and across the angle of the wound to the cervical canal on either side after splitting the cervix nearly three-quarters of an inch. The flaps, which otherwise commence to grow together at the angle of the wound, are held apart by this tongue of mucous membrane, aided by packing with sterile gauze.

Prof. Mars has improved on this by first dissecting back a flap or tongue of tissue on each side of the cervix directly over the line of the proposed section of the cervix. After the latter is split the flap naturally falls into the angle between the flaps where it is readily fastened by catgut, without leaving any raw surfaces on the exterior of the cervix to be protected.

Mars recommends that the cervix should be split up to a point midway between the external os and the attachment of the vagina. The operation is performed just after menstruation. A strip of iodoform gauze is placed between the lips of the wound, after the flap is fastened in the angle, and changed every second day for a week or ten days. The flap must come easily to the line of the cervical canal, as it is apt to shrink and become too short to fill the angle.—*Centralblatt für Gynäkologie*, No. 8, 1897.

A CASE OF EXTRAORDINARY FRUITFULNESS (Valenta), reported originally by Dr. Boër, in 1809. The mother was one of quadruplets, and the father was one of twins. Thirty-two children were born in eleven labors, twins three times, triplets six times, and quadruplets twice, twenty-eight were living and

four dead, ten boys and two girls lived.—*Centralblatt für Gynäkologie*, No. 11, 1897.

A NEW SUTURE MATERIAL, OR A KIND OF ARTIFICIAL SILK AND SILK-WORM GUT (v. Gubaroff).—Strong, smooth, coarse linen thread is selected, though cotton might answer the purpose. The fat is removed by boiling it in a soda solution and then washing it in cold water. It is then boiled in ordinary water for five minutes, and a second time after six or eight hours. It is now wrung out with clean hands and kept in alcohol, though the latter is not important. It is later dried in a clean room, such as the operating-room, wound on glass spools and laid for twenty-four hours in a 25–30 per cent. solution of celloidin (Schering) in equal parts of alcohol and ether. About 1 per cent. of castor oil, sterilized by boiling, is added to the above solution. The ends of the threads are kept out of the mixture and fastened to a sterilized wooden frame on which the threads can be rolled. An excess of the collodion can be removed by the thumb and finger, or by blotting-paper. The thread is rolled on glass spools when dry and kept in air-tight jars. It is boiled in a one to one-thousand solution of corrosive sublimate, six or eight hours before using, and again just before the operation. Such thread differs little in its physical characteristics from braided silk.

The preparation of artificial silk-worm gut is as follows: The thread is prepared in the same manner, stretched horizontally in a clean room, and coated over with the above-mentioned solution of celloidin, by pouring it on a folded paper and applying to the thread; an excess of the solution is carefully expressed. As soon as the thread is dry, this procedure is repeated till the threads appear like silk-worm gut; they are then given a final coating of a weaker celloidin solution (5 per cent.) in the same manner. If the threads are not perfectly smooth, they can be polished with cotton, dampened with alcohol, to which a little ether has been added. This material is very similar to catgut, it is easily tied, does not kink, and is very cheap in comparison to silk and silk-worm gut.—*Monatsschrift für Geburtshilfe und Gynäkologie*, Band 5, März, 1897, H. 3.

GEO. R. SOUTHWICK, M.D.

TREATMENT OF SENILE METRITIS.—Dr. S. E. Sheldon, Topeka, Kansas, outlines the following plan for treatment of this affection. Caustics or the sharp curette should never be used as they are liable to leave an ulcerating surface, which, because of the low vitality of the tissues, cannot readily be healed. He employs the dull curette, not oftener than once per week, packs the cavity with iodoform gauze and applies a tampon, saturated with extract hamamelis and boro-glyceride, to the cervix. This is followed in from twenty-four to forty-eight hours by an antiseptic douche which may be either extract of hamamelis diluted with fifteen or twenty parts of sterilized water, hydrastis canadensis, or normal saline solution. Instead of packing the uterus with gauze, the powdered iodoform may be used with a suitable powder-blower. He considers iodoform the sheet-anchor in the management of these cases. When the granulations are confined to the cervix, iodoform can be applied on a tampon, either dry or moistened with extract hydrastis canadensis or boro-glyceride. He also uses tannate of glycerine applied on a tampon or ichthyol and boro-glyceride 1–20 used the same way.—*Medicine*, April, 1897.

W. D. CARTER, M.D.

MONTHLY RETROSPECT

OF HOMŒOPATHIC MATERIA MEDICA AND
THERAPEUTICS.

THE HOMŒOPATHIC USE OF TUBERCULIN.—In a discussion of the viruses of tuberculosis in their homœopathic application, Dr. François Cartier, of Paris, calls attention to the fact that at the time of the introduction of the ever memorable Koch's lymph there were included under the head of poisonings by this drug vascular lesions, acute arteritis, arterio-sclerosis, changes in the vessels of the heart and kidneys, and acute nephritis. Apropos of acute nephritis, the supposition was that the kidney became congested because of the presence in the part of certain tuberculous islets, and that the kidney responded, like the tuberculous lung, under the influence of *tuberculin* by acute congestion. However this might be, these vascular lesions draw attention to the homœopathicity of Koch's lymph in nephritis. Dr. Jousset has experimented with encouraging results, using homœopathic dilutions, in Bright's disease; and at the meeting of the Société Homœopathique Française, on April 18, 1895, Drs. Tessier, Silva and Jousset, father and son, mentioned the diminution of albumin in cases of chronic and incurable nephritis, and the appearance of that substance in acute cases.

Dr. Arnulphy, in a series of articles in the Chicago *Clinique*, speaks favorably of Koch's lymph in homœopathic dilutions in cases of tuberculosis. Dr. Cartier remarks that Koch's lymph was used in our school in all the homœopathic dilutions possible at the moment of its far-resounding discovery. To mention only one instance—Drs. Simon, V. L. Simon Boyer and Chancereel used the drug at the Hahnemann Hospital in Paris at the time of the arrival in France of the first consignments of lymph from Germany, and Dr. Cartier is nearly certain that there is not at this time a single country where homœopaths have not used this remedy in all the infinitesimal dilutions. Homœopaths and allopaths have actually taken pretty much the same side as regards the primitive formula put forward by Koch (he is not now speaking of trials of new tuberculins); and Dr. Arnulphy would be fortunate enough were he able to revive its credit after its several years' oblivion as a cure for tuberculosis.

Clinically, this lymph of Koch has led to wonderful cures in lobular pneumonia, for it produces pneumonia, broncho-pneumonia and congestion of the lungs in the tuberculous patients. Its homœopathic action would thus appear more trustworthy than its isopathic, and Dr. Arnulphy makes this remark: "I make bold to state that no single remedy in our materia medica, not excepting *ipæac.*, *iodine*, *tartar emetic*, and even *phosphorus*, approaches the singular efficiency of *tuberculin* in well-authenticated cases of the affection (broncho-pneumonia), be it in the child, the adult, or the aged. Its rapidity of action is little short of wonderful, and all who have used it in this line are unanimous in their unbounded praise of its working."

The four cases quoted by Dr. Mersch (*Journal belge d'Homœopathie*, November, 1894, January and May, 1895) are very instructive:

The first is that of a member of the Dutch parliament, who had contracted a pneumonia which reached a chronic stage. While undergoing a relapse his expectoration assumed a rusty color, which color disappeared completely in three days on treatment with *tuberculin* 30th.

The second case is that of a person who was seized, after an attack of measles, with broncho-pneumonia. On the fifth day Dr. Mersch prescribed *tuberculin* 6th. In a day or two the condition of the chest was completely altered.

In the third case an old lady was likewise attacked with broncho-pneumonia, together with digestive troubles, and was for a long time in a serious state. After the lapse of a single night, which was a rather distressing one, under the action of the remedy the amelioration was great, and it was with difficulty that Dr. Mersch found a touch of bronchitis in the very place where the day before he had heard nothing but the tubular *souffle*. The prescription ran: *Tuberculin* 6th, eight packets of ten globules each, one to be taken every two hours.

Finally, in a fourth case, the patient was a lady of vigorous physique, and twenty-five years of age, who had a capillary bronchitis, combined with symptoms of angina pectoris. Dr. Mersch had once more an opportunity of viewing with astonishment the rapidity with which the therapeutic action of *tuberculin* may be manifested in such cases.—*Hom. World*, June 1, 1897.

THE THERAPEUTICS OF CONSTIPATION.—A translation in the *Homœopathic Recorder* (April 15, 1897) includes the following suggestions as to remedies:

(1) *Nux Vomica*.—Constipation with spasmodic urging to stool. The urging comes on in paroxysms. Hæmorrhoids, lack of appetite, fulness of the abdomen, sleeplessness, rush of blood to the head.

(2) *Sulphur*.—Constipation with a sensation of fulness, even when little has been eaten. Frequent ineffectual urging to stool, hæmorrhoids, constipation, alternating with diarrhœa, the latter in the morning. There have been suppressed eruptions. Dishes made from flour do not agree with him. Cross moods. Relaxed state. A sedentary occupation largely contributes to the ailment. *Sulphur* thus has symptoms similar to those of *nux vomica*. When *nux* effects only a partial cure, *sulphur* comes in to finish it.

(3) *Plumbum*.—Constipation with morbid constriction of the anus. The abdomen is drawn inward. The stool consists of hard, black balls, like sheep's dung. The patient complains of a sensation as if the anus was drawn up by a string into the colon.

(4) *Opium*.—Constipation without urging to stool. There is no inclination to stool at all. The intestines are packed full. Complete inaction of the intestinal canal. The stool also consists of hard, round, dark balls.

(5) *Lycopodium*.—Constipation with gathering of flatus. Even a little food makes him feel sated. The patient feels worse from 4 to 8 P.M.

(6) *Natrum Muraticum*.—Constipation with depression and ill-humor. When there is a stool the mood improves. Severe formation of acidity. Dull headache with a nasty taste.

(7) *Graphites*.—Constipation with girls and women with delayed or difficult menstruation. Inclination to tetters or to sores on the legs.

(8) *Alumina*.—Striking inaction of the colon, so that even a soft stool requires great exertion.

(9) *Carbo Vegetabilis*.—Constipation with urging to stool, which is relieved by discharge of flatus; the urging is, therefore, caused by flatulence. Bluish, protruding piles, with burning in the abdomen.

(10) *Silicea*.—The stool is partially extruded from the colon, but seems to slip back. There is, therefore, a lack of expulsive force in this part of the colon. The stool is, with great effort, pushed partly downwards; when the propelling force pushing downward ceases, it slips back.

(11) *Sepia*.—This remedy has an urging as if a foreign body was in the colon; a constant sensation of fulness in the colon, even immediately after the stool. As in *alumina*, even a soft stool is expelled with difficulty. The *sepia* symptoms nearly always call for an affection of the uterus simultaneous with constipation.

(12) *Anacardium*.—There is frequent urging to stool, but when an effort is made for its expulsion, the urging is gone. The patient complains of feeling as if there was a plug or some foreign body in the colon. The symptom is *not* the effect of the retained stool.

SABAL SERRULATA IN DISEASES OF THE PROSTATE.—Hale doubts that *sabal*, the saw palmetto, has any direct action on the muscular tissue of the prostate. It may, however, profoundly affect its nerve-supply, as does corn, silk, or hyoscyamus. Moreover, he believes that it may act on the glands of the prostate, as it does on those of the throat, by actual contact, primarily to stimulate and irritate in large doses, secondarily as a sedative in small doses. In acute or chronic prostatitis that organ becomes enlarged, because of the irritation of its glandular structure and of the mucous and sub-mucous tissue with which it lies in contact. *Sabal* probably removes this irritation and allows the congested prostate to resume its normal size—if actual induration with hypertrophy has not obtained, in which case he doubts if any drug will cure. This view may explain the success which has attended the use of *sabal* in cases where the prostate is supposed to be diseased.

Dr. Mullins, in the remarks preceding his reported proving, gives the following indications: "Enlarged prostate, with throbbing, aching, dull pains, and discharge of prostatic juice. At times discharge of mucus, also a yellowish fluid. (The latter symptoms show its power over mucous membranes, when cystitis has followed as a secondary condition depending on an irritable and enlarged prostate as a primary cause.)" This must be largely theoretical, based on clinical observation, for we have no record that *sabal* has caused enlarged prostate or many of the other symptoms he mentions. Nor has it caused orchitis, orchalgia, impotency, etc., from enlarged prostate.—*Medical Century*, June 1, 1897.

THE USE OF ANHALONIUM LEWINII.—The mescal button is reported by Dr. Weir Mitchell as producing extraordinary color-visions and form-illusions, and he remarks that he called particular attention to these symptoms as resembling the visual phenomena of migraine, and suggests the possibility that the drug may be found useful in this affection. This sounds very much like good homœopathy.—*Medical Century*, June 1, 1897.

THE USE OF KALMIA IN HEART AFFECTIONS.—According to Dewey, *kalmia latifolia* is a remedy for cardiac hypertrophy, especially after rheumatism, and has the symptom so common in heart affections, namely, “numbness of the left arm.” There is, with *kalmia*, much pain and anguish about the heart, some dyspnœa, palpitation, and pressure from the epigastrium toward the heart. The heart is irregular, and intermits every third or fourth beat. There are shooting pains through to the scapula.

Kalmia is an excellent remedy for cardiac troubles when they have been caused by the suppression of rheumatism by external applications.

The pulse of *kalmia* is slow, but not as slow as that of digitalis. *Phytolacca* has tingling and numbness of the right arm, but the three chief remedies having this symptom in the left arm are *kalmia*, *rhus* and *aconite*. Acute pericarditis depending on rheumatism will call for *kalmia*; the sharp pains taking away the breath will call for attention to it. Hering says *kalmia* has a most beneficial action in diminishing too rapid pulsations of the heart.—*Medical Century*, June 1, 1897.

COLLINSONIA IN CARDIAC DISORDERS.—Dewey claims that in functional disorders of the heart *collinsonia* is an excellent remedy, especially when they are reflex from hæmorrhoidal troubles or alternate with them. Although the provings do not indicate a specific action on the heart, it has been found useful where there is much cardiac irritability, traceable to suppressed hæmorrhoidal bleeding. The cardiac nerves seem irritated, and there is great sensitiveness about the heart, fulness and oppression about the chest, with difficult breathing and faintness. It cured for the writer a case of severe constrictive pain about the heart in a man who habitually passed blood with his stools. Upon the disappearance of the blood from the stools the heart symptoms commenced, and when the flow of blood became re-established the heart symptoms disappeared. *Collinsonia* entirely cured both conditions. A characterizing indication is a persistent rapid but weak pulse; the action is excessive, but the force is deficient. Hale thinks that *collinsonia* acts on the heart by removing obstructions or irritations in the liver, portal system or kidneys, and by increasing muscular tonicity.—*Medical Century*, June 1, 1897.

THE NEWER HEART REMEDIES.—Dewey remarks that there is quite a large class of remedies affecting the heart which might be termed the Newer remedies. Among these is *convallaria*. It is useful in valvular diseases of the heart with scanty urine, dropsy and great dyspnœa. It has so relieved the œdema in a number of cases that the patient could lie down. Dyspnœa, palpitation and œdema due to mitral disease have been relieved by it. The provings of the remedy show a feeble heart-sound, anæmic murmurs over the jugular vein, pain in the region of the heart, and an uneasy fluttering—a sensation when exercising as if the heart stopped beating and then started up again, causing a faint, sick feeling. This uneasiness about the heart should suggest its use in the condition known as cigarette or tobacco heart.

Another of the newer remedies is *adonis vernalis*. It increases arterial tension, regulates the heart-beats by lessening the frequency of the pulse and increasing the force of the cardiac contraction. The remedy is well tolerated, increases diuresis and acts with rapidity. Otherwise it is similar to *digitalis*.

It is seen, however, from the above that its action is physiological rather than homœopathic.

Lycopus virginicus is still another heart remedy of this class. It is useful in cardiac irritability with depressed force, after use of cardiac depressants or cardiac stimulants, excessive hypertrophy, muscular weakness, etc. Its use has been limited.

Another remedy useful in irritable heart is *collinsonia*, and, like *digitalis* and *lycopus*, it is secondarily homœopathic. Irritability of the heart, due to suppression of hæmorrhoidal flow, especially indicates *collinsonia*.

Strophanthus is one of our recent accessions to the line of cardiac remedies. It has been found useful in weak, hypertrophied, irritable heart, with tense arteries and a free discharge of urine.

Sparteïn sulphate has also been used in feeble heart in nervous and hysterical persons, and at the climacteric; but, as most of these remedies are used for their physiological effect, they, as yet, should find no place in homœopathic therapeutics.—*Medical Century*, June 1, 1897.

CINNABARIS IN IRITIS.—The chief indication will be found in the characteristic pain over the eye, although, in addition to this, there may be shooting pains through the eye into the head, or soreness along the course of the supra-orbital nerve and corresponding side of the head. The pains are worse at night, usually in the evening, though in one case the aggravation was from one to three in the morning.—*Hom. Eye, Ear and Throat Journal*, April, 1897.

CALCAREA CARB. IN PURULENT OPTHALMIA.—The discharges from the eye are often profuse, and, therefore, this drug has been used with advantage in purulent ophthalmia, especially in that form found in new-born children characterized by profuse yellowish-white discharges, great swelling of the lids, and ulceration of the cornea.—*Hom. Eye, Ear and Throat Journal*, April, 1897.

THE HEART SYMPTOMS OF CROTALUS, LACHESIS AND NAJA.—Ravold, of St. Louis, says that the general neurotic action of the different snake poisons upon the heart is very similar, but it would be out of the question to attempt to get along without any one of them. The primary toxic effect of *lachesis* and *crotalus* upon the blood is disintegration, changing the fibrin so that arterial blood will not coagulate. With *naja* we have the opposite toxic effect, that of increasing the fibrin and red blood corpuscles, producing a tendency to coagulation. The principal centre of action of each is upon the pneumogastric, but the intensity and manner of action varies. *Crotalus* acts more upon the heart muscle because of the change in the character of the blood. The time is coming when *crotalus* will be to the heart troubles occurring in inebriate and syphilitic men what *lachesis* now is to the heart troubles occurring in hysterical women at the climacteric.

Crotalus has tenderness of the left side; palpitation; sore pain about the heart; feeling as if the heart tumbled over and over, or was trembling; pulse irregular, intermittent, feeble, may be dicrotic; passive hæmorrhage, where blood oozes from all the mucous membranes or into surrounding tissues, producing spotted yellow fever appearance; may have an extreme jaundice of the skin. Persons who recover from the rattlesnake bite suffer all their lives, as

those who have once been the victims of alcohol suffer all their lives; but *crotalus*, homœopathically administered, will greatly modify that suffering and help the weak old tottering hearts to bear along the life current for a greater distance.

Lachesis is more intensely neurotic than *crotalus*, acting not only upon the vagi but on the sympathetic system. This accounts for its profound effect upon the sexual system. The pulse is more rapid than that of *crotalus*; chronic nervous palpitation; great shortness of breath; cramp-like distress; pulse very irregular. *Lachesis* has the greatest sphere of action upon the functional diseases of the heart, but it also has a limited application to those organic troubles that threaten the sufferer with sudden death, viz., aortic regurgitation and aortic stenosis.

Last we come to the king of all heart remedies, *naja*. Its field of useful action is that of organic heart trouble. Its action upon the mitral valves is wonderful. Having a well-defined presystolic murmur, with shortness of breath, palpitation upon the least exertion, short sympathetic cough when stooping, sudden, jumping, throbbing headache coming on after exertion. For this *naja* is given, and there is a change. The murmur decreases, and not because the heart is growing too feeble to make a murmur, but because the muscular tone is improving. *Naja* is also recommended by the writer for presystolic and systolic murmurs transmitted to the scapular region.—*Medical Arena*, April, 1897.

PARALYSIS AFTER MUMPS.—L. Revilliod (*British Medical Journal*) reports a case where, directly after an attack of mumps, a boy, aged seven years, became paralyzed. Weakness of the legs was first noticed, and this was followed by dysphagia and rapid emaciation. The legs could be slightly moved, but he could not stand. There was left facial paralysis. Both eyes could be shut together, but the left not alone. The tongue could be scarcely protruded as far as the lips, and deviated to the right, but there was no atrophy. The movements of the palate were sluggish. Swallowing was almost impossible, and liquids swallowed brought on a paralytic cough, necessitating feeding with a tube. Respiration was labored and sighing. All four limbs were equally affected. The sphincters, special senses, general sensation, and the vaso-motor system were intact. Faradic excitability of the left facial was diminished. Galvanism caused great pain, but no contraction. The cranial nerves involved were: the sixth on both sides, the left facial, the right hypoglossal, the external division of the spinal accessories to the neck, and the internal (recurrent) branches.

Diagnosis.—Infantile paralysis could be excluded. Diphtheritic paralysis was thought probable, but all inquiries negatived this. There had been no case of diphtheria in the commune for five years; the boy's throat had been examined when the mumps began, and no signs of diphtheria were present, and his brothers and sisters all had mumps about the same time. Under treatment (hypodermatic injections of strychnine, massage, etc.), the boy rapidly improved, and was quite well in about six weeks. It is not surprising that mumps, being an acute specific disease, should be followed by paralysis; nevertheless, only one other case has been reported.—*Med. Bulletin*, May, 1897.

F. MORTIMER LAWRENCE, M.D.

THE HAHNEMANNIAN MONTHLY.

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ON THE MEDICINAL AND THERAPEUTIC EFFECTS OF THE VEGETABLE OILS.

BY EDWIN M. HALE, M.D., CHICAGO.

THE medicinal action of the various oils extracted from the members of the vegetable kingdom form an interesting study both to the chemist and physician. In some instances the oil represents the whole medicinal power of the plant. In others it is only one of the several constituents. While it may be said that all have a similar action on the body, yet each has an individuality of its own, in which it differs from every other oil. At the same time, such is the close similarity of some of the oils that they can be arranged in groups, each member of which resembles others in its general action, but differs in some special characteristic effect.

It is the object of this paper to present a general and special view of these resemblances and differences, and present them in such a way that the student and practitioner can readily grasp their peculiarities and therapeutic applications.

GENERAL ACTION.

I think it may be asserted that they all cause some vascular stimulation in moderate doses. In large doses they have an

opposite effect—depression, even to collapse and death. All cause congestion and dilatation of the arterioles and capillaries, especially of the mucous surfaces, and also those of the brain and kidneys, and probably other tissues. This congestion may be so intense as to cause extravasations and hæmorrhages. The mucous membranes, if irritated by their continued use in large doses, take on a catarrhal inflammation, which may end in erosion and ulceration. Nearly all, if not all, have an antiseptic influence, and are destroyers of microbes, germs and bacilli. Nearly all, in large doses, are stimulants of the nervous system, but, in disordered conditions of that system act as sedatives to the brain and spinal cord when given in small doses. The first and simplest group which I present is composed of oil of coriander, oil of fennel, oil of caraway, oil of chamomile, oil of anise, oil of thyme, oil of lavender, oil of peppermint, oil of cummin, oil of spearmint, oil of cajuput, oil of pimento.

These oils are mild in their action, with the exception of the oil of chamomile, which is very powerful; but it is obtained in such minute quantities that its use is not extensive. Phillips (*Materia Medica*), however, says "It can be used safely in doses of 2 to 8 minims for adults" ($\frac{1}{100}$ to $\frac{1}{10}$ drop is enough for infants). Its composition and physiological effects are very interesting, and show that homœopaths are right in claiming for chamomile curative powers over nervous erethisms. Phillips quotes several chemists and experimenters who assert that the oil is practically a valerianate of butyl, and that "it reduces the reflex excitability in a remarkable degree." Grisar proved the important fact that when reflex excitability had been excited by strychnia it can be calmed by oil of chamomile, and that when an animal had been fortified by the oil it was not capable of being tetanized by strychnia. We see, now, why even small doses of the tincture can calm the reflex irritations of children and women, caused by teething, intestinal, uterine or ovarian irritation. In this respect chamomile resembles the bromides, valerian, scutellaria and asafœtida. The oil of cummin has similar action over reflexes as oil of chamomile.

Oil of anise has probably a similar action, but less in degree. It has lately been found that it is a powerful antiseptic, destroyer of toxic bacteria and intestinal ferments. This ex-

plains its popularity in the flatulent colic of children and fermentive diarrhœa.

The oil of fennel, caraway, pimento, coriander and dill are all similar to chamomile, but of less power. All are valuable in intestinal colic, flatulence and gastric fermentations.

Oil of lavender is, in large doses, a narcotic poison, causing death, preceded by convulsions. Unlike chamomile, it appears to cause excitations of the reflexes in large doses. Yet, in small doses, it has been found useful in hysteria, nervous headache, hypochondriasis and flatulent colic. This proves the truth of the law of similia.

The oils of spearmint and peppermint have long had a reputation in similar affections, especially of the intestinal tract. Peppermint oil, especially the crystallized oil—menthol—is a powerful local anæsthetic, but causes, at the same time, dilatation of the capillaries, like eucaine, while cocaine has just the opposite effect.

The oil of thyme has recently come into great prominence as an antiseptic and bactericide. It is largely used in surgery under the name of thymol, and thymol gauze rivals iodoform gauze in the dressing of wounds and suppurating surfaces. It seems to resemble oil of anise. It has always had a high popular reputation in intestinal pains, flatulence and diarrhœa. I shall refer to the two last-mentioned oils when treating of another group noted for its antiseptic properties.

Oil of cajuput resembles the oil of anise, but seems to have some special antispasmodic power. It is successful in spasmodic colic, gastralgia, spasms of the œsophagus, globus hystericus, incarcerated flatulence, and reflex disorders arising from intestinal irritation.

The following group is noted for the antiseptic properties of its members: Oil of cloves, oil of turpentine, oil of cinnamon, oil of thyme, oil of wintergreen, oil of eucalyptus, oil of sassafras, oil of pine-needles, oil of peppermint, oil of anise, oil of myrtle, oil of guaiacol.

Since the subject of intestinal antiseptics has become so important, investigators have been busy in trying to find substances which, in safe doses, will render the intestinal canal aseptic. The bichloride of mercury will do this, but not in safe quantities. The various preparations of bismuth—gallate,

naphtholate and subnitrate—are all safe, but are not absorbable, which makes them inapplicable to certain cases. Carbolic acid and the carbolates are useful, but their action is local.

The oils mentioned above have not only a local action on the intestinal canal and its contents, but pass into the circulation and disinfect the various organs and tissues through which they are eliminated.

Some experiments lately made in German laboratories show that the oil of cloves in minute quantities is fatal to all forms of bacilli and bacteria. It is more deadly to such low forms than creosote. In a paper published in a late number of a medical journal the reporter relates a case of tuberculosis of the lungs in which he was giving the oil of cloves in doses of 5 drops, three times a day, with apparent benefit. It may, however, prove of no more value than creosote or guaiacol. But in fermentive, painful disease of the intestines, due to toxic bacteria, it may prove of great value. Oil of cloves is an anæsthetic to mucous surfaces and exposed nerves. The oil of cassia or cinnamon is said to be equally destructive to bacteria and ferments as any known bactericide. I have found it better than bismuth in many cases of flatulent dyspepsia, dysentery, with profuse bloody evacuations, and fermentive diarrhoea. In a case of fecal fistula, which was under treatment in St. Luke's Hospital, Chicago, powdered cinnamon, in half-drachm doses, proved more potent to keep the intestinal contents aseptic and inodorous than any other drug. The oils of peppermint and sassafras possess similar properties. The oil of myrtle has been found to be a decided antiseptic. At one time I used it in several cases of chronic purulent bronchitis, when eucalyptol failed to benefit. The improvement under its internal use in $\frac{1}{10}$ - to 1-drop doses, and its inhalation, was productive of marked benefit.

It is a clear fluid, of aromatic and penetrating smell, which can be conveniently administered in gelatin capsules. French authors have recommended it in bronchial catarrh, and scattered observations have been made on its disinfecting properties; but a methodical use of this substance has not been made, and it is not mentioned in various recent works on therapeutics. After only one gelatine capsule, the breath smells of myrtol within an hour, and the effect lasts from twenty-four to

forty-eight hours; but in order to subdue putrid processes, two capsules (each containing 0.15 gramme) were usually given every two hours. The appetite improved under its use, and the expectoration and breath lose all offensive odor with remarkable quickness. Four cases are mentioned by Professor Eichhorst as showing the beneficial action of myrtol in a striking degree; but one of the cases showed that it possesses no specific action against the tubercle bacillus. The expectoration diminishes under its use; the appetite, as before remarked, improves, and the patients feel better generally.

A notable and useful group is composed of oil of copaiva, oil of eucalyptus, oil of sandal-wood, oil of saw palmetto, oil of cubebs, oil of erigeron, oil of thuja, oil of erechthetes, oil of turpentine, and oil of pine needles.

The main characteristic which all this group possesses is their influence over mucous surfaces. When taken in pathological doses they cause a congestion of the mucous membranes, which is attended by a copious discharge of mucus, at first clear, but becomes milky and opaque, then yellow, green, and often bloody and purulent. They are all capable of causing acute arterial hæmorrhages. This catarrh-inducing property is not confined to their influence over any particular mucous surface, although the urinary tract is perhaps the first to feel it. They cause catarrh of the ureters, bladder and urethra, catarrhal inflammation of the stomach and intestines, also bronchial and laryngeal catarrh. Yet there are no drugs which are so often prescribed in these catarrhal conditions. On what theory are they prescribed? Certainly not because they are antipathic. Those who do not like to admit the truth that they act according to the law of similia may call their action "alterative" or "substitutive;" but it cannot be denied that they cure those diseases which they can cause. It is not necessary to prescribe them in very minute doses. A few drops of the oils, not too frequently repeated, except it be in very acute inflammations of the urinary organs, in which fractional drop-doses should be given, the $\frac{1}{100}$ or $\frac{1}{1000}$ attenuation often being sufficient. Turpentine has an action peculiar to itself. It is capable of causing acute and chronic nephritis and some form of Bright's disease, active and passive renal hæmorrhages and violent cystitis; yet no remedy is so potent against these diseases. Frac-

tional drop-doses must be used, however, except in *passive* hæmorrhages from the kidneys, where I have always found 5-drop doses every 3 hours prove promptly curative.

The derivatives of turpentine (terebene and terpene hydrate), are oftener used than the oil, and are probably more efficient in bronchial catarrhs, winter cough and humid asthma. Oil of erigeron and erechthetes are next to turpentine in the treatment of hæmorrhages from the urinary organs and in bronchial hæmorrhages.

Oil of eucalyptus, saw palmetto, and pine-needles seem more useful in catarrh of the air-passages. In this they resemble grindelia and yerba santa, which probably contain an oil.

The oil of juniper properly belongs in this group, as it has similar effects on mucous surfaces.

A small group having a special affinity for the reflex nervous system and the brain is represented by oil of amber, oil of nutmeg, oil of valerian, oil of sumbul, oil of asafætida, oil of lavender, oil of cajuput, oil of camphor, and oil of celery.

These have always had a reputation in hysteria, melancholia, sleeplessness and other nervous ailments having a reflex origin. They resemble the bromides, scutellaria, chamomile, and cypripedium. The various preparations and salts of valerian have a world-wide reputation equal to asafætida, sumbul, castoreum and musk in diseases where the mind and sensorium are affected. All the above are useful in intestinal and ovarian reflex disorders, in chorea, neuralgia, and local spasm, spasmodic vomiting and tympanites. The oil of camphor is a powerful stimulant. Oil of celery resembles valerian.

The oil of *gaultheria* and oil of *black birch* stand alone in their specific action in rheumatic affections. From them are derived salicylic acid. Although this acid is now prepared synthetically from other sources, the acid from the above oils is the safest and most trustworthy. These oils are valuable also as antiferments.

The oil of *guaiac*, or *guaiacol*, has similar curative properties and is asserted to be a bactericide more powerful than creosote, which is a kind of oil obtained from the destructive distillation of certain woods. Both have been, and are now, highly praised in the treatment of tuberculosis. This guaiacol is of value in tonsillitis. If applied during the early stage, it will often

abort it. The strength of the application should be 50 per cent., although the crude oil has been used applied with a brush to the area of inflammation. At the moment of contact the pain is often severe, but is followed by great relief. It is anæsthetic, subduing the intense pain of quinsy for several hours. Oil of cajuput has similar properties. It is now largely used in catarrhal laryngitis, pharyngitis and rhinitis. When applied as a spray it is anæsthetic and antiseptic. (5j to 5j albolene.)

One group of oils appear to have a specific action over the genital organs of both sexes: Oil of savine, oil of rue, oil of pennyroyal, oil of saw palmetto, oil of origanum, oil of thuja, oil of sassafras, oil of tansy, oil of senecio, oil of parsley (apiol).

Of these the oil of sabina, ruta, hedeoma and tenacetum are the most toxic. They have the reputation of causing miscarriage, and are largely used by quacks as ingredients in "female regulators," but are uncertain in their action. I do not believe they can directly cause miscarriage; they do cause violent congestion of the uterus and ovaries, and may thus destroy fœtal life, but they possess no power to expel the contents of the uterus. This makes them particularly dangerous. The legitimate use of these drugs lies in an opposite direction. They are of great value when used homœopathically in uterine hæmorrhage, frequent and profuse menses, dysmenorrhœa, uterine leucorrhœa, ovarian diseases, and in threatened and habitual miscarriage. In these diseases small doses, not larger than the 2x dilutions, are of immense value.

The oils of senecio and parsley, if we are to believe the testimony of many eminent American and French physicians, appear to have a regulating influence over the menstrual function. In my *New Remedies* I collected a large amount of positive testimony relating to the value of senecio in abnormal menstruation, to the effect that it was equally useful in scanty or profuse, delaying or frequent, and also painful menstruation. Lately English and German physicians report using it with excellent results. The oil is extracted with ether, and contains a resin. It is called an oleo-resin; dose, 5 to 10 drops. A concentrated preparation—a greenish powder, *senecioin*—possesses the same properties. Dose, $\frac{1}{10}$ to 1 gr. t. i. d.

Oil of parsley (apiol) is prepared from *petroselinum sativum*,

of which we have a brief proving, showing that it irritates the urinary organs. No mention is made of symptoms of the female sexual organs. French and English physicians praise it highly, giving it the same qualities claimed for *senecio*. They say "In amenorrhœa, scanty menstruation, and dysmenorrhœa the efficacy of *apiol* is very remarkable. The first two authors of those just named remark that, whether the object be to promote the primary establishment of the menses, to restore them when suspended, or to render them abundant when they are scanty and attended with pain in the pelvis, loins and thighs, no medicine is more worthy of confidence than this. It need hardly be remarked that when the menstrual derangement depends upon constitutional causes these must first be removed by an appropriate treatment, as iron when anemia is present, purgatives and local depletion when a state of plethora or if uterine congestion exists; nor need it be added that *apiol* can be of little service if organic changes of the uterus or ovaries form the radical cause of the irregular, defective, or painful performance of the catamenial function. But these cases apart, we have found no medicine so certain in re-establishing the suspended flow or in causing its original appearance where this has been unduly delayed, provided, in most cases, at least, that some indications of a menstrual *nisus* existed."

It is put up in capsules and largely advertised by drug manufacturers in circulars that praise it in an extravagant manner as having the power to "remove all menstrual irregularities." Some women assert that it will "bring back the menses during the first month of pregnancy," but I have seen no satisfactory proof that it will do so. I confess that, although I have prescribed it largely in scanty menses or in amenorrhœa in young girls, or delaying menses in adults, I have never had sufficient success to enable me to praise it as highly as do French authorities.

Organum, saw palmetto and *thuja* are excitants of the sexual instincts, and if used judiciously appear to increase sexual power. This is especially the case in regard to saw palmetto, which seems to act as a direct nutrient to the sexual organs and their nerve supply. Their analogies are *kola*, *damiana*, *amber*, and *nux vomica*, while they are antagonistic to the action of *salix niger*, bromides, *salicin*, etc.

Origanum has been used in nymphomania with success, given in the 6th dilution; *cantharis*, 6th, has the same curative action. Some of the vegetable oils are valuable on account of their destructive influence over the larger parasites of the intestinal canal. These are called "vermifuges." The most powerful is probably the oil of wormseed (*chenopodium*), although it is not as much used now as formerly, *santonin* having taken its place. But I have had cases where *santonin* failed to destroy the large round worms, yet which were promptly killed by small doses of oil of wormseed.

Oil of pumpkin-seed has considerable toxic influence over tape-worms, but not so much as oil of male fern. The former can be administered freely in large doses, while the latter must be cautiously used, for it has caused dangerous symptoms.

Oil of turpentine possesses vermifuge powers to a large degree, and is a popular household remedy for all kinds of worms.

Oil of wintergreen has been credited with the expulsion of *Taenia*.

One of the most powerful dydrogogue cathartics known is a vegetable oil, the oil of *croton tiglium*. In doses of 2 to 5 drops it has caused purging, so excessive as to simulate cholera. It is used in cases of poisoning or when the intestines need sudden evacuation, as in cases of uræmia from Bright's disease or diabetes. It is used successfully in homœopathic doses (6th dilution), in cholera infantum, in cholera morbus, or acute lientery when the bowels move profusely after eating or drinking. The oil of *jatropha curcas* is more powerful than *croton* (used in cholera, 6th dil.).

Castor-oil, considered a mild laxative, owes its laxative qualities to minute quantities of a powerful poison—ricinin. The cold expressed oil contains the least—probably about equal to the 3x dilution of ricinin. This toxic element probably resides in the hull of the seed, for 20 seeds eaten by a strong healthy man caused death, but the oil can be taken in doses of several ounces without causing severe symptoms, yet the treatment of cholera with repeated doses of half an ounce of castor-oil has been successful, and the use of ricinus 3x and 6x in cholera and cholerine has proved the truth of the law of Similia.

I have purposely given only the common names of the oils. I did not intend to enter largely into their therapeutic properties but to give only their general effects, physiological and therapeutic. The method best adapted for their administration is of considerable practical importance. When given in material doses, gtts. 1 to 10, they can be given in a hard or soft capsule without offending the taste of the patient. When the dose is a fraction of a drop they had best be prepared in alcoholic dilutions, 1 to 10—or triturations in sugar of milk on the same scale.

ACUTE AND SUB-ACUTE DISEASES OF THE MIDDLE EAR.

BY HAROLD WILSON, M.D., DETROIT, MICH.

(Read before the Homœopathic Medical Society of the State of Michigan, May, 1897.)

It is one of the chief regrets of the aural surgeon that so many of his patients are incurable. It is an almost daily experience to be consulted by some unfortunate sufferer from deafness or tinnitus, to whom no hope of benefit can honestly be extended. Some distinguished man has said that there were only two things in his practice which afforded him any satisfaction: “1. *His fees.* 2. *Impacted cerumen.*” This fact of incurability may be one of the natural and inevitable peculiarities of diseases of the ear; it may come from our own incapacity; it may be the fault of the patient, or be something for which his previous medical attendance is responsible; or it may be due to a combination of all these factors. In any case, it is too frequently a miserable fact from which there seems to be no escape.

Now, it is no doubt true that some diseases of the ear are naturally incurable. The mechanism of hearing is a complex piece of machinery, and it would indeed be remarkable if the surgeon could repair all the breaks which may occur in it. The fact of our own incapacity is also indisputable. As we grow in wisdom and experience we can do some things which were previously impossible to us. We study the action of drugs and accomplish with medicine what we had formerly reserved for the knife; we study the effect of surgical methods

and accomplish with the knife what we had vainly attempted with medicines. We grow skilled in the interpretation of obscure symptoms, and by timely interference save our patient's life.

In examining the causes of deafness in many of those cases which we commonly regard as incurable, we find that class of diseases which constitutes the topic of this paper conspicuous. The history of many patients is something like this: Following or attending a heavy cold, there is a feeling of obstruction, discomfort or pain in one or both ears, with more or less deafness. As the general catarrhal symptoms improve, so do those of the ears, lingering a little perhaps, and leaving in the end an impairment of the hearing of which the patient may be quite unconscious, since it is evident only upon the application of certain delicate and special tests. Later another cold supervenes. The same train of aural symptoms reappears. Recovery takes place. More colds follow, and almost before the patient is aware of the fact there is a noticeable reduction in his hearing powers. From this point there may be a steady though slow increase in the deafness, and morbid alterations take place in the ear, which, when the specialist is consulted, render a bad prognosis inevitable.

Now, the particular point to be observed in the history of such a case (and this applies to the history of other forms of these acute diseases also) is not so much that it has ultimately become hopeless as that in its early stages it was curable under proper treatment. This does not mean that we can prevent all patients who come to us in the early stages of their complaints from becoming deaf, but simply that we can prevent some of them from becoming so.

An earache, a temporary or slight deafness, an obstructed breath-way, adenoid growths in the naso-pharynx, are not things to be looked upon lightly. The sooner we bring ourselves and our patients to realize this fact the sooner will we cease to have occasion for the lamentations we have confessed.

The following clinical cases illustrate some of the ordinary features of the various acute diseases of the middle ear:

CASE I.—*Acute Tubal Catarrh, or Eustachian Catarrh.*—G. E. F., æt. 35. September 8, 1893. History of more or less pain

in the right ear for two or three days. The watch is heard in this ear at a distance of one-quarter to one-third inch. A slight accumulation of cerumen was removed by syringing. The membrana tympani was dull, but not congested. After inflation with the Politzer bag the hearing in the affected ear rose to one and one-half inch. Mercurius was prescribed internally, and the hot-water douche to relieve pain.

September 9.—Not much pain since yesterday. Inflation and the use of the douche continued.

September 14.—No pain for a few days. Hearing better.

September 16.—On inflating ears bubbles are seen in the tympanum and are heard both subjectively and objectively. Daily inflations of the ears were continued.

October 1.—Hearing nearly normal. No bubbling on inflating. No subsequent trouble.

CASE II.—*Acute Non-Suppurative Inflammation of the Middle Ear*.—M. W., æt. $4\frac{1}{2}$ years. December 12, 1896. Slight earache and noticeable deafness for several days. Examination showed tympanic membrane of both ears dull and reddened. Hearing difficult to test with accuracy, but evidently considerably reduced. The child was ordered to remain at home, to take a light diet, to wear large pads of cotton over the ears and sides of the head, and to have dry heat applied to the ears several times daily. If the paroxysms of pain continued, the hot-water douche should be used. The ears were inflated, the patient remonstrating violently. *Fer. phos.* was given internally.

December 13.—Temperature 101.6° . Slight pain at times, anorexia and general malaise. Treatment continued.

December 14.—Temperature 104.6° . Symptoms otherwise about the same. *Hepar sulph.* given internally and treatment otherwise continued.

The subsequent history of the case was uneventful. During the two or three days that followed the temperature fell to normal, gradual improvement set in, and in two weeks more the child was practically well. No discharge occurred at any time from the ears. Subsequent inflations of the ears were advised, but the advice was not followed. Nevertheless the hearing continued to improve, and in the course of the following month was fully restored.

CASE III.—*Tubal Obstruction (Catarrh)*.—M. B., æt. $2\frac{1}{2}$ years. March 10, 1897. The patient had measles six or eight weeks ago, and since then has not seemed to hear well. The examination of the hearing, as is usually the case with very young children, was difficult, but some impairment of this function was evident. The history of earache was obscure. The tympanic membranes were dull, but not congested. The ears

were inflated with the Politzer bag and *kali mur.* given internally.

March 11.—Great improvement in hearing noticed by the mother. Treatment continued.

March 13.—Hearing seems to be normal, and the patient is discharged.

CASE IV.—*Sub-Acute Suppurative and Non-Suppurative Inflammation of the Middle Ears Due to Adenoid Growths.*—H. O. C., æt. 5. July 14, 1893. Repeated attacks of pain in the ears, particularly in the right, which has at times discharged. The left ear has never discharged. Has always had some throat trouble, with symptoms of catarrh. Snore during sleep. Nasal respiration impeded. The watch is heard in either ear at about one-quarter inch. The memb. tymp. of the right ear was dark red; that of the left ear dull and dark, but not congested, like that on the right side. Passing the finger into the pharyngeal vault, abundant adenoid vegetations were discovered.

After a week's time, during which the ears were inflated daily and the nose and naso-pharynx sprayed with an alkaline antiseptic solution, the hearing rose for the watch to four to six inches on the right side and six to eight inches on the left.

July 21.—Under chloroform the pharyngeal vault was thoroughly curetted.

July 25.—Inspection of the pharynx showed some growths remaining upon its lateral walls. These were removed with forceps under cocaine.

From this time the patient gradually but continually improved.

In the following March there was a slight renewal of trouble with the right ear, apparently due to a greatly enlarged tonsil on that side. This tonsil was removed, and the patient had no further trouble. I saw him last summer, but have not the record of his hearing at that time. There was, however, no noticeable impairment in ordinary conversation.

CASE V.—*Acute Suppurative Inflammation of the Middle Ear, Involving the Mastoid.*—P. G., æt. 35. February 10, 1896. History of acute pain in the right ear for a week or two, with purulent discharge. No previous trouble. Pain very severe. Examination showed the mastoid region to be red, swollen and tender upon pressure. Purulent discharge from the ear moderately abundant. Temperature 99.4°. Patient sent to the Grace Hospital, and on the evening of the same day I operated, making a curved incision behind the ear, along the line of its base, from the tip of the mastoid process to an inch above the level of the superior wall of the external auditory canal, extending down to the bone. A pocket of pus was found over the lower part of the mastoid, and about two drachms were

evacuated. A sinus was discovered leading to the mastoid antrum. This was enlarged with the drill and curette, and all necrosed portions of the mastoid were removed. Antiseptic precautions were carefully observed. The wound was dusted with a mixture of iodoform and boracic acid powder, lightly packed with a strip of iodoform gauze, and covered with a dressing of dry sterilized gauze. The wound was redressed on the following day. It would perhaps have been better to have left the dressing undisturbed. The patient rested comfortably and was without pain until the third day, when he complained of feeling nervous and of having some fugitive pains in the ear.

On the sixth day there was severe pain in front of the ear, and the tissues lying over the articulation of the jaw were swollen. On palpation there seemed to be some fluctuation at this point, and a sterilized aspirating needle was inserted, but no pus or fluid of any kind was found. A Japanese heater was applied over the cheek. On the following day there was œdema of the right side of the face, involving the cheek and eyelids, with much constant pain. The temperature was 102.4°.

The patient was transferred to the isolating ward with the diagnosis of erysipelas. There was pain in the lumbar region, and a dull, aching pain in the right side of the face. Very little sleep.

On the next day, February 17, there was vesication of the right cheek over the malar bone, and the swollen parts were very painful. Later in the day the blister broke and discharged a small amount of serum.

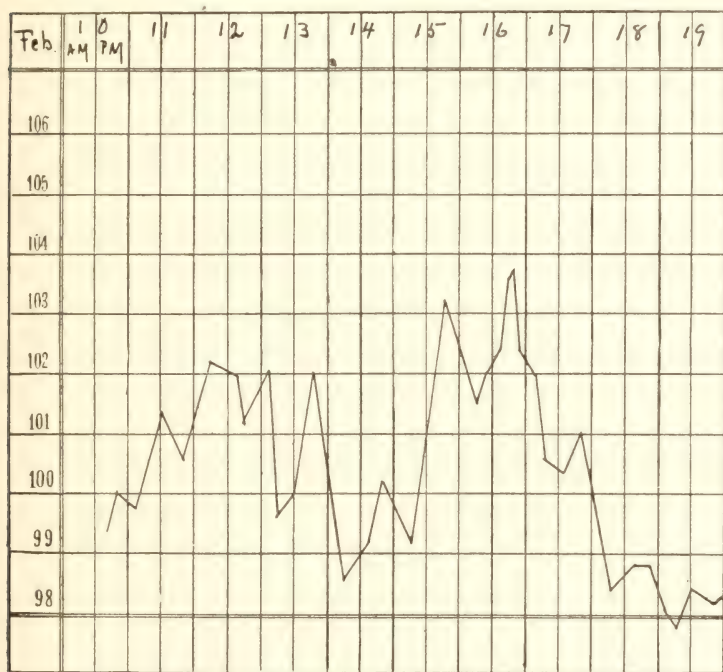
From this time the patient improved, the swelling receded and the pain gradually disappeared. For a number of days there was a severe headache.

On the 25th the wound was redressed for the first time in ten days. It was in good shape, and the dressings were but slightly soiled. Subsequently the wound was redressed as became necessary, and the patient left the hospital March 7. In about two weeks after this the wound had entirely healed and the patient was discharged. The hearing in the affected ear was good. During the progress of the case various internal remedies were given as they seemed to be indicated, *hepar, merc., apis, rhus, bell.* and *bry.*

The temperature chart shows the influence of the erysipelatous attack. Why this complication should have occurred I am unable to say. There was no opportunity of infection in the hospital. It is interesting to note that the wound, although in the closest proximity to the area in which the erysipelas began, remained entirely unaffected by it.

The treatment adopted in the foregoing cases was comparatively simple. In many cases of tubal and tympanic catarrh more extended local measures will be necessary, both in the ears, the nose and naso-pharynx.

Some homœopathic aurists report many highly interesting and remarkable cures in acute and chronic affections by the



simple administration of some internal remedy. The longer I practice medicine the more I become convinced that to make remarkable cures, whether by medicine alone or by any other means, is a special gift, not vouchsafed to most of us. I am free to confess that I have often tried to imitate some of these recorded successes, and that I have as often failed, humiliating as the confession may be. The above cases, the treatment adopted and the results obtained, offer little that is remarkable. It would require no special gift to duplicate them.

PHYTOLACCA IN CORYZO.—Total obstruction of the nose; when riding, forced to breathe through the mouth; not relieved by blowing the nose; flow of mucus from one nostril, while the other is stopped; mucus discharged with difficulty; continued hawking.

FORMALDEHYDE AS AN ANTISEPTIC.

BY F. C. BENSON, JR., M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the County of Philadelphia,
March 11, 1897.)

ALTHOUGH the use of formaldehyde as an antiseptic is not a new idea, a consideration of its uses and efficiency may be of interest.

Formaldehyde, or formicaldehyde (CH_2O), is a gaseous body, the result of the oxidation of methyl-alcohol. Being soluble in water, it is put on the market in the form of a saturated aqueous solution bearing the name of "formalin"; this constituting the stock solution or base from which solutions of definite strengths are formed. Formalin is a colorless liquid with a markedly pungent odor, its fumes being inflammatory to the mucous membrane of the respiratory tract and conjunctivæ, causing sneezing and lachrymation.

During the last two years a number of experiments have been made by scientists, both in Europe and this country, to determine the bacteriacidal power of formalin, some of the principal conclusions arrived at being as follows:

First.—A solution 1–10,000 checks the development of the bacilli of anthrax, cholera, typhoid, diphtheria and staphylococcus aureus, very dilute vapors of formicaldehyde having the same action.

Second.—A 1 per cent. solution kills pure cultures of pathogenic germs in an hour.

Third.—A 3 per cent. solution disinfects the hands.

Fourth.—A 1 per cent. solution to be an instant deodorizer of fœcal matter, while a 10 per cent. solution renders such matter sterile in ten minutes.

Numerous reports have also been published as to the ability of formalin and its vapors to sterilize instruments, dressings, clothing, etc.

I have found a 1 per cent. solution fully strong enough to exert marked germicidal action when applied in septic conditions, while a 2 per cent. solution answers well to sterilize instruments.

Great care has to be taken that the formalin solution is not left in contact with the tissues for too long a period, as its action is to harden them, resulting in a pronounced sloughing if this caution is not observed. This property of hardening tissue has been taken advantage of by pathologists in preparing specimens for microscopic sections. A 4 per cent. solution has also been used to harden catgut for surgical use, as after being in this solution for twenty-four hours it may be boiled without softening, although the gut has been found to swell slightly.

Probably the best method of employing the formalin solution as an antiseptic application is to alternate every twenty-four or forty-eight hours with bichloride of mercury dressings. The formalin dressing may be covered with dressing-paper or rubber protective tissue with advantage, as it is prone to rapidly evaporate.

During my service in the dispensary of our hospital I have been daily brought in contact with various septic conditions demanding direct and efficient antiseptic measures, and I do not remember a single case, where the method of treatment by formaldehyde in its various forms was used in time, where the desired result was not arrived at. Its application does not seem to produce any systemic symptoms, as do the stronger solutions of corrosive sublimate and carbolic acid, while its bacteriacidal power appears to be equally efficient. The only really bad effect I have seen from its use was a tanning of the tissues, followed by a troublesome sloughing, in a case where the primary dressing was allowed to remain undisturbed for some days. A more recent mode of applying formaldehyde as an antiseptic surgical dressing has been suggested by Schleich, of Berlin, who makes use of a powdered formalin-gelatine, or, as it is called, "glutol." It is prepared by allowing gelatine, which has been dissolved in water, to dry in the fumes of formaldehyde, his theory being that when the powder comes in contact with the tissue cells, a decomposition takes place by which the gluten loses its combination with the formaldehyde and the gas is set free, allowing it to penetrate to all portions of the wound. Schleich gives the following rules for its use:

First.—In recent wounds the glutol must be brought into intimate contact with all the raw surface. In lacerated wounds

all irregularities and cavities must be filled with the powder. Portions of tissue that are manifestly incapable of recuperation must be removed. In recent incised wounds the crust that forms may be left *in situ* until healing occurs.

Second.—In older injuries the primary dressing must be renewed in twenty-four hours.

Third.—Inflammatory and suppurative wounds must be treated according to general surgical principles before the formalin-gelatine is applied; incision, drainage, cleansing of the wound, removal of dead tissue, fragments, etc., must be employed as indicated.

Fourth.—With ulcerated areas the preliminary removal of all dead and non-viable material is of the greatest importance.

Fifth.—The powder must always be covered with aseptic gauze, except in the case of small wounds, where a crust formation occurs in a few hours.

Adhering closely to these rules, I have experimented with this treatment in a large number and variety of wounds with very satisfactory results, the septic wounds, as a rule, showing marked improvement in a few days, and operative wounds healing under the primary dressing.

This form of formaldehyde certainly possesses a decided germicidal power, and is free from any toxic properties. The burning sensation on application, pungent odor and hardening of tissue peculiar to the solutions of formaldehyde in water are entirely absent in this preparation.

I have been particularly impressed with the results obtained in cases of recurrent carcinoma of the breast treated with the formalin-gelatine powder, the lesion remaining sweet and clean for months, and presenting a remarkably healthy appearance for such a malignant condition. One of the latest uses for formaldehyde has been devised by Dr. F. W. Brierly, who employs it, in combination with a specially-prepared gelatine, in the treatment of specific urethritis.

Formaldehyde has proved to be a germicide of great power, and should hold a high place in the treatment of septic conditions, the solution being advisable where large areas are involved, while the formalin-gelatine powder answers better for wounds, whether clean or septic, making an ideal dry antiseptic method of treatment. About the only disadvantage that

can be claimed against the use of formaldehyde as an antiseptic is its property of hardening tissue, which I think is found only in cases where the solution has been used too strong or where it has been left in contact with the tissues for too long a period, a disadvantage which is far outweighed by the actual results obtained when used in septic conditions, and which may be avoided by remembering the caution already stated.

A FEW SIMPLE POINTS IN THE TREATMENT OF ALCOHOLISM.

BY WALTER A. CORSON, M.D., ATLANTIC CITY, N. J.

(Read before the Trousseau Club, Philadelphia, March 2, 1897.)

ALCOHOLISM to-day, at the close of our nineteenth century, stands at the head of drug-habits, no other poison having kept pace with its rapid increase. No drug of to-day compares with it in its far-reaching influence for the destruction of health, for the degeneration of brain, nerve and physical power, and for the spread of mental and nervous disorders. Nor does it stop its work here, but it infects generation and generation with a mental and moral weakness that crops out despite our best efforts. So a few hints in regard to its treatment may not be amiss.

Splendid management must characterize the treatment of the acute exacerbation. The hearty co-operation of both family and nurse must be secured to withhold absolutely all spirituous liquors. But is it policy to thus withhold the food that has kept the life-spark from dying out, that has kept body and nerves together during the debauch? I am safe in asserting that this can be safely and profitably done in ninety-nine per cent. of cases, and the remaining one per cent. will go begging in many instances. Allow no such thing as "feeding the flame," no "tapering off," but make the verdict absolute. What shall we allow in its stead? We must allow him drink, and that of the right kind only. In my experience nothing soothes the stomach and quiets the nerves as does cow's milk or beef tea, taken as hot as can be sipped slowly. The benefit

derived from the use of either of these articles can be enhanced by the addition of a good tincture of capsicum, to be used in the proportion of one drachm to the pint of the liquid food. Preference must be given to milk, and a smaller quantity of capsicum if diarrhœa is a prominent symptom, as it frequently will be if the patient has used whiskey as his exclusive drink. Two ounces of this mixture every two hours will answer at first, but as the gastric irritability grows less and less, and the appetite shows signs of returning, the quantity may be increased and the interval lengthened. Up to this time, semi-solid or solid food should not be considered, but we may now alternate the milk or beef tea with some well-cooked cornstarch or wheatlet. Here let me enter a protest against the use of oatmeal in this condition, particularly in warm weather. It quickly irritates the sensitive stomach, giving rise to acid eructations, flatulence, and thirst, a trio of very undesirable symptoms at this stage. For several days the diet should be of vegetable origin, with meats used sparingly, or entirely withheld. Let the adoption of regular diet be gradual. If, at any time, delirium tremens threatens, or should there be a history of a previous attack, hold to the hot-milk diet until every sign of this insanity shall have vanished.

For allaying the thirst following the debauch nothing equals cracked ice, or, if the condition of the bowels will warrant it, the use of juicy fruits.

As to remedies, they will help us out, but the entire weight of the responsibility must not rest upon their shoulders. Nothing has served me so well in the majority of cases as ignatia, given in a lower potency. This remedy corrects both nerves and stomach in an amazingly short space of time. Should the gastric symptoms be the prominent and all-important ones, *nux vomica* will hold precedent. The nervous symptoms may call for *hyoscyamus*, *belladonna* or *stramonium*, but *the* remedy for the control of these symptoms is the hydrobromate of hyoscyne. I hold this remedy in high esteem, and know that definite results will follow its administration. Many advocate the use of this drug hypodermatically, but let me say that the use of a hypodermic syringe here is uncalled for, and leaves a dangerous impression on the already-nervous patient. One-sixtieth ($\frac{1}{60}$) of a grain by the stomach acts quite as well as one one-hun-

dredth ($\frac{1}{1000}$) of a grain hypodermatically. It may be repeated in two hours.

As to specifics, we have none. Most private formulæ advertised as specifics have strychna as their basis, always in indefinite and unknown quantities. This fact alone causes physicians far and near to denounce them.

Now that our patient is out of the woods, some barrier must be raised in order to keep him from re-entering. Here, as never before, the personality of the physician must assert itself. Some help must be given to pacify that morbid impulse for drink which will sooner or later come over him. Some patients find that hot coffee, tea or milk will accomplish this end with them. Others take large quantities of ice cream, or find relief in smoking violently until the impulse has passed. Indeed, in many homes for the treatment of alcoholism the extensive use of smoking-tobacco is not prohibited. Another important point lies in keeping our patient busy. I have heard it said that "the busier a man is, the harder it is for the devil to get into conversation with him," and this is surely true in this connection. Give him no idle moments, no time for retrospection, but keep him forging ahead. Correct every faulty manner of living, remove every undesirable associate, and let the change in his environment be as complete as circumstances will allow.

COUNTERFEIT SCIENCE.

BY A. PALEN POWELSON, M.D., MIDDLETOWN, NEW YORK.

WITHIN the past few years the calendars of our courts have become crowded with numerous actions, brought against railroad corporations to recover damages for personal injuries sustained by reason of real or fancied negligence on the part of these corporations. The necessity for defending such actions as these, and of producing sufficient medical testimony to raise an issue of fact for a jury in reply to the expert evidence usually introduced by injured persons, has resulted in a special phase of medical study, whose main object seems to be to overthrow

the generally accepted conclusions of well informed physicians. Those who are really interested in the advancement of medical science will never be disposed to cavil at any *genuine* contributions to its literature, either in the way of discovery or theory, but everyone will admit that there is a vast difference between the scientific conclusions of experienced surgeons based upon personal diagnosis and pathological treatment, and the crude guesswork of comparative novices, who are solely interested in seeking to evade the force of facts by substituting fancies in their place. It is, of course, perfectly right and proper that railroad companies should employ medical men, and that persons seeking to recover money from these companies should submit themselves to examination by their duly accredited physicians. This is fair and just, because such a course discloses the actual facts, and affords an equal opportunity to the experts on both sides to apply such usual and satisfactory tests as the common consensus of the profession recognizes as conclusive. It is, however, a far cry from this sensible and impartial method of procedure to that which has been recently adopted in the class of works issued by some railway surgeons which seem to be intended as hand-books for those who are employed to get up medical defences in the kind of actions referred to. I allude especially to a publication by Mr. Page, the surgeon of the London and Northwestern Railway Company, which treats of "Injuries to the Spine and Spinal Cord."

The principle adopted by the author in question is apparently this: to assume in all cases against railroad corporations that the plaintiff is a fraud and a liar, that his medical witnesses are co-conspirators in the fraud, and their conclusions based upon ignorance or old-fashioned and exploded tests; and that, so far as his special thesis is concerned, there is really no such thing as concussion of the brain and spinal cord involving permanent or incurable injury. Mr. Page sees this subject through spectacles of his own, framed in railroad gold and fitted with lenses which magnify infinitesimal defects on the one side and minimize radical errors on the other. The verdicts of juries, composed of men of ordinary common sense, sustained in thousands of instances by the decision of judicial tribunals of final resort, afford a tolerably conclusive answer to his suggestions of wholesale malingering on the part of injured

suitors. His position on this point also involves the further assumption that the host of reputable and intelligent surgeons who have testified on behalf of such persons in these numerous litigations were either incapable of detecting fraud or eager to act as confederates in its consummation. One can have but little patience with this sort of indiscriminate libel, and it will probably have as little effect upon the profession at large as the barking of a toy terrier would have upon the average elephant.

But Mr. Page is very positive about spinal disease. There is, and can be, no such thing, he says, as "molecular disturbances of the brain and spinal cord," and he is very severe in his comments upon the authorities who hold otherwise. He "does not comprehend to what kind of injuries they refer;" he finds "their phraseology ambiguous," "not sufficiently explicit," "lacking in clearness." It never occurs to him that the difficulty of comprehension may be his own, or that the lack of clearness may be in his own receiving medium. They are simply wrong—all of them—and he alone is right, and altogether so. Certainly, if they lack "clearness," he is not wanting either in assurance or self-esteem.

Let us make a brief issue. It is the commonly received opinion that a direct blow upon the spine, without injury thereto, frequently produces disease of the spinal cord; it is also believed "that indirect violence, as a sudden twist or a fall upon the feet or buttocks, without actual spinal lesion, may, and often does, produce such a vibratory jar of the central nervous system as leads to molecular change in the finer nerve-elements, resulting either in immediate and complete functional paralysis or forming the commencement of degenerative inflammation." It has been conclusively demonstrated that recovery never takes place from the secondary results of concussion, which is really the shaking out of nervous force, as magnetism is shaken out of a magnet. It is, further, the universal experience that there is only a slight tendency to recovery exhibited in cases of actual concussion. All this Mr. Page denies. He says, "*Urbi et orbi*," "*Ex nihilo, nihil fit*." "Nor are we justified in believing, from the evidence, that the nervous phenomena arising from shakes and jars of, or blows upon, the body, and described as characteristic of concussion of the spine, are in reality due to chronic inflammation of the spinal

membranes or cord, or that they are even due to any pathological lesion of the spinal cord at all." And he further says, of cases of spinal concussion:

"Their tendency is to get perfectly well after a longer or shorter time." He thus enjoys the proud felicity of being "*Athanasius contra mundum*." He sweeps away, with a contemptuous wave of the hand, all the received conclusions of able and experienced scientists, while he gives no explanation of the *facts* upon which those conclusions rest. This is a short and easy method of getting rid of evidence which may inconvenience his clients when they are sued, because they have negligently paralyzed a man's spine for life. It furnishes a spurious and counterfeit science which bears a sufficiently similar stamp to the real to confuse and befog a jury, and may pass equally current with the unlearned. It is like the ready-made science of Captain Wragge, in Wilkie Collins's famous novel. That sort of science fooled the shrewd Mrs. Lecount, and, as Mr. Page evidently thinks, is a "good-enough Morgan" for a jury. One can admire the ingenuity of this scheme, but can hardly regard it of permanent value to real science. On the contrary, it may be temporarily injurious. It is, in any event, worth more than a passing notice, because of its practical bearing on future litigation. Henceforth, railway corporations can have on hand, with other office furniture, a copy of Mr. Page's manual, and can always be prepared with a ready-made defence, in cases of alleged spinal concussion, complete in character and decisive, if it be believed. It rests upon these two maxims, for which we have the *ex cathedra* authority of Mr. Page:

Proposition 1.—There is no such thing as spinal concussion.

Proposition 2.—If there is such a thing, it is never fatal and always curable.

The mere enunciation of these maxims, which form the Apostles' Creed of this new cult, may hereafter be expected to terminate all inconvenient lawsuits in favor of the defendant corporation. "*Roma locuta est, causa finita est.*"

HYDRASTIS IN CORYZA.—Constant discharge of thick, white mucus from the nose, with profuse lachrymation; stuffed up, smarting sensation in posterior nares, with discharge of thin, clear mucus; sharp, raw, excoriating feeling in both nares.

SHOCK, ITS DIAGNOSIS AND TREATMENT.

BY C. R. HAMAN, M.D., READING, PA.

(Read before the Homœopathic Practitioners' Association of Reading, Pa., October 6, 1896.)

THE subject which I desire to present briefly to the Society is of vital importance to both physician and surgeon. The term "shock" is used in such a number of different ways that one becomes confused, and finds himself unable to differentiate shock from other conditions, or to understand the therapeutic principles involved in its treatment or prevention.

In the minds of many there is no difference between shock and collapse. When we remember that in shock we have a characteristic tendency to a prompt and complete reaction, with rise of temperature and increased activity in the circulation, and in collapse we find no such tendency, there should be no further question as to whether these are two separate and distinct conditions. The close resemblance between shock and inflammation has impressed me more than a little. In either condition, as a result irritation, contraction of the muscular tissue exhibits itself in the arterioles and capillaries; this is followed in the second stage of both shock and inflammation by dilatation of the vascular elements, and in the third stage we have complete stasis, with dilation of arterioles and capillaries. Owing to the fact that the abdominal circulation is feebly supported, the effect is more marked in this location, the blood of almost the entire body seeking the abdominal cavity.

If there is prompt reaction to this condition we term it a state of shock; if the condition is without this reaction it is termed collapse; and if we find the same condition in a localized area we describe it as an inflammation. With your permission I borrow, for the purpose of illustration, a word-picture of a patient as we say "in shock." The vital powers are profoundly prostrated. The patient lies upon his back, too weak to move, and almost too weak to breathe. The pulse is feeble, quick, irregular, or absent; heart-sounds are indistinct, or perhaps inaudible. The inspiration is faint, sighing and slow. The features are pinched and shrunken, the lips pale

and livid, the eyes dull and shrunken and often turned upward, the pupils dilated and sluggish. The skin is pale, cold and clammy, the sweating is at times profuse; the extremities are cold and the nails purplish; the temperature falls in proportion to the severity of the shock, the depression exceeding two degrees. The intellect is usually clear and unimpaired, except in those cases complicated with injuries to the head. There may be vomiting, which is a sign of reaction; the sphincters may be relaxed. These are the symptoms that characterize and of themselves constitute the condition known as shock; yet experience proves that characteristic symptoms cannot be relied upon, whether considered singly or collectively, unless they are most carefully interpreted. Looking at an individual in the condition mentioned—profoundly prostrated, lying on the back, too weak to move, or even breathe—the first question that arises is, is this a real or an imaginary indisposition? Is it a case of illness or an accident?

In shock the pulse is admitted to be generally feeble, quick, irregular, or even absent; yet aside from shock, quickness in each beat may, and often does occur. Brain troubles, structural or functional, are apt to produce irregularity of pulse. In extreme debility from any cause we find a rapid, very small and thready pulse—a pulse that is associated with deficiency of the aortic valve of the heart.

Inspiration in shock is faint, sighing and slow, yet in pleurisy and peritonitis, where every move is painful, markedly influences the respirations. Again, dilatation of the heart, pleuritic effusions, etc., are known to interfere. Sighing respiration in heart diseases is so frequent as to be expected upon careful examination. At times a certain form of dyspnoea that resembles the respiration in shock occurs in mitral lesion, with dilatation of the heart.

Neither is it in shock alone that the pupil is dilated. This condition is also found in apoplexy, hydrocephalus, and narcotism by belladonna and stramonium. Locomotor ataxia presents an instance of inactivity of pupil such as occurs in shock.

While the temperature is best secured by the thermometer, it is often well-determined by the educated touch. Colliquative sweating is habitual in many diseases, as pulmonary phthisis. It may also be taken as an indication of general relaxation of

the system. It would be a matter of little difficulty to discuss the question of diagnosis further, but our time being limited, I will proceed to the question of

Treatment.—Our first care should be to loosen all constriction about the neck and waist, so as not to impede respiration. Place patient in a recumbent position, with head low. The temperature must be maintained by means of hot-water bottles or hot blankets, but as soon as patient is conscious of pain the hot-water bottles should be removed. In the meantime, 10 drops of digitalis tincture or $\frac{1}{60}$ -grain of strychnia should be administered hypodermically. If further efforts are necessary, inversion, artificial respiration or anal dilatation may be resorted to. A hot bath has also been recommended, the water varying from 90° F. to 110° F. Rectal injections of hot fluids, as plain hot water or hot milk; these enemata are best given through the catheter or rectal tube. Bandaging the extremities has been resorted to. When the patient has been subjected to great loss of blood the intravenous injection of a 1 per cent. saline solution is of great importance. The fluid should be injected slowly, at the rate of a pint in fifteen minutes. The temperature of the fluid should range from 100° F. to 115° F. If an operation is contemplated in which there is anticipated great loss of blood, $\frac{1}{60}$ -grain of strychnia should be administered hypodermically before etherization and repeated at frequent intervals.

Among internal remedies we find that if no other remedy is called for, *camphor* will serve a good purpose, especially if there is a tendency to diarrhœa from shock and exhaustion.

Carbo Veg.—Surface blue and cold; breath absolutely cold, and yet patient wants to be fanned.

Arsenicum.—Great restlessness, thirst for water little and often, yet vomits as soon as swallowed.

Other remedies to be thought of are *arnica*, *cham. digit.*, *helleb.*, *nux mosch.* and *staph.*

MERCURIUS IN CORYZA.—Ordinary catarrh, whether epidemic or not; frequent sneezing; copious discharge of watery saliva; swelling, redness and soreness of the nose, with itching and pain in the nasal bones on pressing upon them; fetid smell of the nasal mucus; painful heaviness in the forehead; night-sweats, chills and feverish heat; great thirst; pains in the limbs; desire to be alone; warmth and cold aggravate.

CHRONIC PURULENT OTITIS MEDIA.

BY H. S. WEAVER, M.D., PHILADELPHIA.

(Read before the Trousseau Club, Philadelphia, October 20, 1896.)

THIS is a chronic purulent inflammation of the middle ear, involving, primarily, the Eustachian tube and tympanic cavity, later the attic space and drum-cavity, and finally the mastoid cells.

I have chosen this subject for my paper on account of its being a disease which is so frequently neglected by physicians, and, when neglected, may lead to such disastrous results—with reference to the future use of the ear, or even to the patient's life—that I think it should be more often called to our notice. Parents are very neglectful of this portion of their children's anatomy, and are frequently misled by some old friend, who is willing and anxious to quote the old saying, "A running ear should not be stopped; the discharge will purify the blood," etc. Again, you will find some patients who think if the ear is treated and discharge stopped, there is danger of driving the disease to the brain. This also is a mistake; chronic discharge should be stopped—not suppressed—as soon as possible. The earlier the treatment is begun, the more satisfactory are the results. Should the discharge be allowed to continue without treatment, it tends to attack the bone, and later the brain.

It is true that some have discharging ears for years, and yet can hear sufficiently well to enjoy conversation or music; but, on the contrary, how many lose the use of the ear through the chronic purulent discharge being neglected, especially in the earlier stages, when, if properly treated, almost every case can be cured. Usually the patient will not consult the physician until hearing is greatly impaired or entirely lost, he being forced to seek treatment on account of the offensiveness of the ear. You should encourage treatment, first, with the hope of regaining some of the lost hearing, and secondly, to prevent an extension of the inflammation from the middle ear to the mastoid cells, the lateral sinus and the brain. While comparatively few die as the direct result of a chronic purulent inflam-

mation of the middle ear, we have fatal brain disease, or pyæmia, or both, as a sequence of this purulent discharge.

The causes of these purulent discharges are: coryza and the exanthemata, chiefly scarlet fever and measles. During our last epidemic of la grippe I saw quite a number of cases which had resulted from that disease, especially where the head symptoms predominated. These cases were usually quickly relieved by treatment, being more of a prolonged acute attack. Scrofulous, syphilitic and phthisical children are more susceptible to these chronic inflammatory conditions than others. Burnett claims that otorrhœa is equally prevalent in the two sexes; but as women are more sensitive about the discharge, more of them consult the physician.

Symptoms.—It is usually a prolonged acute condition, which has gone on from lack of treatment, following most frequently one of the exanthemata. There is very little, if any, pain—simply, as the patient expresses it, “a running ear.” We have a decrease in hearing or a total deafness, depending upon the extent of the damage wrought by this disease; some tinnitus, more or less constant, and at times vertigo. The discharge is usually more abundant in children, is thick and quite yellow, and with less odor than in adults. This increased discharge in children is due to the mucous membrane being more active than in adults. In adults the discharge is more apt to be scanty, dark in color, and very offensive, due either to caries of the bone or lack of cleanliness—the latter allowing the pus to remain in the canal, where it decomposes and causes the odor, which, if once smelled, cannot again be mistaken.

With the ear-speculum and head-mirror you will find the external canal inflamed, membrana tympani perforated or entirely gone—depending upon the amount of destruction present—drum-cavity congested and inflamed. If the discharge has lasted any length of time, and has been quite profuse, the patient will often appear weak and debilitated, showing the drain on the system.

Treatment.—I am a thorough advocate of the dry method of treatment, not using the syringe on every case of discharging ear that comes to the office. I believe water is an irritant to the ear in these conditions, which fact I will endeavor to prove to you later on, by citing a few of the many cases which have

come under my notice within the past few years. When a patient presents himself for treatment, all the history is noted down, and the hearing-distance carefully noted by watch-test before making an examination or touching the ear with an instrument. I then carefully mop out the ear with a cotton-covered probe. This, while it takes some time, can be done without pain to the patient. Occasionally you will find a very sensitive patient who will need the greatest care and gentleness, or you will not be able to cleanse thoroughly; and it is in this thorough cleansing that the secret of success lies in this line of treatment, being careful not to use force sufficient to irritate the delicate and inflamed surfaces.

After the outer portion is cleansed, I inflate the middle ear and Eustachian tubes by the Politzer bag or the Globe Nebulizer, by placing the tube in one nostril, tightly closing the other, and directing the patient to swallow, at the same time compressing the bulb. This forces the air through the Eustachian tubes into the middle ears, forcing out what discharge is there. I next mop out the external canal until all the moisture has disappeared, leaving no trace of moisture on the cotton, as it is gently mopped over the surfaces. Should I feel that the surfaces are not thoroughly cleansed, I mop out the ear with peroxide of hydrogen, pure, or with equal parts of glycerine, carefully drying the ear after its use. I then insufflate some boric-acid powder—just sufficient to cover the surface thoroughly; this can be used plain, or with a little permanganate of potash, one to fifteen or twenty parts of boric acid. In the very chronic discharge, when insufflating is not sufficient to dry up the discharge, it is necessary at times to pack the external canal and tympanum with boric acid. Here the greatest care should be observed, for fear of damming back the discharge instead of simply drying it. We often have acute exacerbations following irritating causes, giving rise to an increase of the discharge and other symptoms.

During this time it is not well to use the powder freely, lest the discharge be dammed back, possibly inducing mastoid involvement.

Where we have granulations as the result of irritating discharges, they can be relieved frequently by the application to the granulation-tissue of absolute alcohol, acetic acid, chloro-

acetic acid, or the use of the curette, as the case may require. Polypi frequently need the use of the snare or polypus-forceps for their removal, after which the pedicle is treated in the same way as granulation-tissue.

Remedies.—I will name a few of the remedies which I have found useful in these conditions, together with some of their leading indications.

Psorinum.—Offensive, thin, dark-colored discharge from the ears, with tendency to pustular formation on face and neck, especially around the nose, mouth and ears. External ears raw; oozing and great tendency to formation of scabs. All the symptoms seem to point to a run-down condition of the system, with impure blood.

Hepar Sulph.—This is a very valuable remedy, especially when we have acute exacerbations, with increased discharge, which is thick, creamy, and somewhat offensive; patient rather weak, with profuse perspiration; very irritable; chilliness from slightest draught of air; eruptions over the body; tendency to mastoid involvement, with great tenderness to pressure; some swelling; headache; dry roughness in throat; and vertigo, especially marked when looking upward; some anxiety.

Silicia.—In scrofulous patients, especially when the disease has affected the bones, giving rise to very offensive discharge, quite dark in color; shooting pains through the ear; profuse perspiration about the head; marked prostration; pain in the limbs.

Kali Bich.—This is a very useful remedy in the later stages of the disease. When the discharge has become thick and tenacious, can be drawn out of the ear in long strings (this a very characteristic symptom for this remedy); very little odor; Eustachian tubes hard to inflate, due to the discharge being so hard to dislodge; some pharyngeal involvement, and often a slight hacking cough.

Capsicum is indicated where we have acute exacerbations going on to mastoid involvement; great pain and heat over mastoid cells, with considerable swelling; violent headache on affected side; patient is feverish, restless, and at times delirious.

Tellurium.—Very profuse, long-lasting discharge; at times considerable throbbing in meatus; ear bluish-red and edema-

tous; canal sensitive to touch, and bleeds very easily; tendency to eczema, especially back of the ears; great depression of spirits.

Sulphur.—Very offensive discharge, which cannot be removed by syringing; external ear very red; discharge corrodes the ear and causes an eczematous condition. With these symptoms we have the characteristic sulphur symptoms, such as hunger at 11 A.M., soles of feet and palms of hands very hot and burning, etc.

Other remedies, such as graphites, aurum, calcarea carb., hydrastis, mezereum, pulsatilla, theridion, alumina and kali iod. come into use very frequently.

CASE I.—Mr. C. F., aged 34 years, has had trouble with his right ear since childhood, following an attack of scarlet fever. The discharge, while not profuse, was quite annoying to him, being almost continuous. He had received no treatment for it, except that he had syringed his ear whenever it became very offensive. About five years ago he had a large polypus removed from the ear, which gave temporary relief, but he kept on syringing his ear occasionally, and the discharge kept up continually. Invariably after going in bathing he noticed that the discharge was aggravated.

When I first saw the case, about three years ago, I carefully mopped out the ear; found the membrani-tympani almost gone; inflated the Eustachian tube and middle ear, carefully drying out the ear again; then insufflated a little boric acid, just to nicely cover the surface; with this I gave psorinum internally, and cautioned him about getting water in the ear. I prescribed using a little non-absorbent wool in his ear each time he went in bathing, in this way preventing water from getting into the ear. Within a week I saw him again, with the most satisfactory result, for the discharge had entirely ceased. I have repeatedly seen him since that time, he having had a number of colds, which always aggravated these conditions, but without the slightest sign of discharge.

CASE II.—Miss R. H., aged 24 years, had a discharging ear, following an attack of measles. The lady was not treated until about ten years ago, when Dr. Ivins removed a large polypus from the right ear which completely filled the external canal, and, by treatment, soon controlled the discharge. The ear remained perfectly well up to four years ago, when she had a large furuncle, which caused severe pain and considerable discharge for a short time. She was cautioned about getting water in her ear. In August, 1894, while at Atlantic City,

after going in bathing every day for about a week with wool in her ear, no discharge following, she went in once without the wool, and in twenty-four hours severe pain developed, followed by a profuse discharge from the ear. She immediately came home, and, after we had seen her a few times, using the above treatment, with ferr. phos. internally to relieve the congestion, the discharge ceased, and up to the present time has not returned.

CASE III.—Master A. M., aged 11 years, four years ago developed an abscess in the left ear, which caused a continuous discharge, and at times severe pain in head, extending over the whole affected side. I saw him first in May, 1894, with a marked acute exacerbation, swelling of the ear and over the mastoid, with great sensitiveness, even to slightest pressure. I cleansed carefully, inflated the Eustachian tube and middle ear, but did not use boric acid powder, allowing as free drainage as possible. Gave him hepar internally. He reported in three days, somewhat improved. This time I insufflated a little boric acid powder. We had a gradual improvement until he was entirely well. The internal remedies which he received during the treatment were hepar, psorinum, cali, pic. and kali bich., in the order mentioned. I saw nothing of him until August of this year, when he came in with a very severe acute attack, caused by going in bathing and getting water in his ear. I used treatment about same as first time, and in four weeks he was entirely well.

The above cases are only a few out of the many which I have seen, and I think I can say without exaggeration that in 75 per cent. of all cases of acute exacerbation, after the age of six years, getting water in the ear was the exciting cause. If you look back over your records for July and August of each year, you will soon see that your cases of chronic purulent otitis media have markedly increased. Inquire into the history of each case, and you will find bathing, or, as they express it, "going in swimming," has caused the attack. If this be true, why should we use water in these conditions, which is sure, if not carefully dried, to cause more irritation, when you can use more soothing agents, such as peroxide of hydrogen, or the clean dry pledget of cotton on a probe? In conclusion, allow me to say: advise early, careful and persistent treatment of all cases of chronic purulent otitis media, and you will have in later years a number of grateful patients, who otherwise would have become a burden to themselves and to those around them.

IMPORTANCE OF BACTERIOLOGICAL STUDY.

BY FRITZ C. ASKENSTEDT, M.D., LOUISVILLE, KENTUCKY.

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Vice-President Kentucky Homœopathic Association.

(Read before the Kentucky Homœopathic Medical Association, May 27, 1897.)

UNTIL medicine has become an exact science, when causes of disease are accurately determined and measured, when their immediate and remote effects are fully understood, and the results of application of remedies can be confidently predicted—an attainment which probably never shall be fully realized—there will be a demand for careful research and progress. In response to this demand investigations are being pushed with vigor in every department, and as a result every year tells of the announcement of new discoveries, new theories and new remedies.

But vital phenomena are too complex to be readily grasped by the human mind; so, notwithstanding the assiduous labor, the ingenuity of methods applied in these pursuits, and the apparent testimony of results experimentally obtained, few innovations stand the crucial test of time and prove of real practical value. Within a short time we have seen the rise and fall of the sulphuretted hydrogen cure, Koch's tuberculine, Brown-Sequard elixir, and the antipyretic treatment; and it is not to be wondered at that, with this suggestive record before him, the careful physician grows conservative and views with suspicion any new hypothesis launched upon the sea of practical experience. With some it has even developed into a sort of mental inertia, condemning, without investigating, everything that does not possess the prestige of old age. Even homœopathy, whose centennial we recently celebrated, is still scorned by many as a "newfangled" theory hardly worthy of investigation. It cannot, therefore, be expected that the "suckling science," bacteriology, is yet to be accorded a universal acceptance.

Although the germ-theory first saw the light as early as 1762, when it was advocated by Penciz, of Vienna, it was only after adopting the methods for isolation and study of the individual

species of bacteria as devised by Dr. Koch that bacteriology received a scientific foundation, and so claimed a place in science.

While slow but steady progress is being made all along the lines of pathology, physical diagnosis and bacteriology, we, as a distinctive school, cannot afford to stand idly by, with closed eyes, contentedly holding on to a symptomatology of a century ago. Indeed, had Hahnemann anticipated his followers would be so averse to all progress and search after truth, he would have deplored the day he laid the foundation for our school. On the other hand, if homœopathy is founded on an immutable law of nature, every natural principle revealed will tend to elucidate our law of cure and aid in its practical application. With this conviction we may fearlessly investigate any department of science, and hail every principle discovered as an ally of our own.

The claims of bacteriology certainly merit our consideration. They involve questions of prophylaxis, diagnosis and therapeutics, and if supported by future research bid fair to mark the beginning of a new era in medicine. Although still in its experimental stage, bacteriology has already proven of immense practical value in limiting contagion; for who can deny that the theory of germ-infection by advocating isolation, scrupulous cleanliness and rigid antisepsis, has confined the spread of contagious diseases within limits formerly unknown? The last two cholera epidemics which proved so destructive in countries defective in sanitary regulations, as India, Asia Minor, Egypt, Turkey and Russia, were confined to a few cities of Germany and France, and its invasion six times successfully resisted in England, twice in Sweden, and three times in the United States. The following figures recording the death-rate from contagious diseases in the city of Paris during the last ten years, as reported in the *Revue Médicale de Paris*, 1896, bespeak the advance made in the science of medicine in that centre of bacteriological enthusiasm:

Deaths caused by	1885 to 1890.	1890 to 1895.
Small-pox,	1,271	655
Scarlet fever,	1,225	946
Measles,	6,672	5,192
Diphtheria,	8,383	7,588
Typhoid fever,	5,903	3,493

The superior results obtained in surgery during the last few years are due, most surgeons will admit, not so much to improved operative skill as to a strict observance of cleanliness and disinfection, and since the introduction of antiseptics the indications for amputations have received new limitations.

There is but one satisfactory explanation of these results, viz., that this improvement is due to the rapidly-growing interest in bacteriology and the more general application of its tenets, thus demonstrating the practical utility of applying the postulates formulated from laboratory experiments for the prevention of contagion by destroying the vitality of all free parasitic micro-organisms. The question whether the presence of specific bacteria is a cause or a result of disease has been ably argued pro and con, and is one of especial importance to us as sanitarians. The fact that in certain details confusion still exists on this point should not be held as conclusive evidence against germ-infection, for it only proves that bacteriology has not yet attained perfection. It remains an established fact that certain specific germs found in specific diseases of animals may be cultivated in artificial media for a number of generations, and thus obtained in pure cultures, which, after being inoculated into another susceptible animal, there continue to multiply, and produce a group of symptoms characteristic of the disease of the animal first affected. If this is not sufficient to prove that bacteria are the specific cause of the disease, the evidence that itch is caused by *acari scabiei* and trichinosis by *trichinæ* must also be unsatisfactory.

The physical theory which affirms that contagion is a molecular motion transmitted to unstable organic compounds has much in its favor; but since it has been amply shown that without transmission of bacteria the poison inoculated does not reproduce itself it lacks a link in its chain of evidence, or becomes identical with the theory of germ-infection. It has been ascertained that if a ball of cotton-wool be made to divide a saccharine solution in a test-tube into two parts, and yeast be added to only one, this part alone ferments, though there remains uninterrupted continuity of the fluid between the two (Green's *Pathology*, last edition, page 321).

Since we are continually more or less exposed to pathogenic bacteria without suffering therefrom, it is evident that for the

development of the disease there must also exist a local or systemic predisposition favorable to the growth of the germ; but it does not at all disprove the theory that bacteria constitute an immediate or exciting cause of infection. The sporules of rust in wheat, which, as John Marshall pointed out some years ago, prevail so extensively among the cereal that there are very few wheat-grains near the points of which one or two sporules of the fungus cannot be found, remain inactive until the vitality of the plant has become impaired by unfavorable surroundings, and then develop and propagate at the expense of the grain. Likewise, in the so-called "potato disease," we find, as a predisposing cause, an undue thinness of its cuticle, accompanied by excessive moisture, which enables the sporules of the fungus *peronospora* to germinate on the surface of the potato and penetrate into its interior. That vegetable parasites should infest and feed upon the more complex and hence more readily decomposable structures of the higher animal organisms can be but a natural inference. The analogy is most striking. Let the human organism suffer a breach of the integrity of its protecting surfaces—the skin and the mucous membranes—or reduce its powers of resistance by an unusual expenditure of nerve-force in excesses of functional activity, and we shall find invading armies of micro-organisms in active struggle with internal resisting structures, resulting in either the destruction of the invading parasites or their host. Prevent the entrance of these germs, and no infection will occur.

But whatever may be the opinion as regards the relation of bacteria to disease, it is evident to all that the presence of certain specific microbes in definite pathological states, and in no other, should afford us a valuable means of diagnosis. It is true that such an association of specific micro-organisms, with specific pathological lesions, has not often been shown, and that right here the opponents of bacteriology have found the greatest cause for doubt; but when we consider the confusing similarity of multitudes of bacteria of different species which, even after careful experimental study, in many instances leave room for doubt as to their identity, and the desire for priority by many investigators whose frequently premature conclusions claim a place in practical medicine, it is not surprising that many errors and frequent disappointments result. However, out of the mist

of confusion, now and then facts are being crystallized and given a permanent place within the domain of science. It is not my intention here to speak of the diagnostic significance of those bacteria requiring elaborate methods of cultivation or difficult staining processes for their identification, but only to allude to a few problems of practical interest that can be worked out by any physician equipped with a suitable microscope and a few staining fluids. Probably the most important problem in bacteriological diagnosis is the recognition of the bacillus tuberculosis, whose presence, in the active state, is so easily detected that almost any beginner, with a little experience in microscopy, will be able to recognize it.

Every physician has realized the difficulty of making a *positive* diagnosis in the incipient stage of tuberculosis on symptomatology alone; and since the curability of tuberculosis in its early stages is amply proven, not only by recorded recoveries consequent on a change of climate and hygienic surroundings, but also from post-mortem examinations of patients dead with other diseases, there is, especially in cases of suspected incipency, a demand for bacteriological tests. Fortunately, it is generally possible to demonstrate the presence of the bacillus early in pulmonary tuberculosis by a few simple staining processes, and so determine the diagnosis. Barring accidental contamination from without of the sputum examined, the presence of the bacillus tuberculosis is considered proof positive of tubercular infection, due precautions having been taken to differentiate it from other bacilli of similar reactions. The value of this test is, however, somewhat curtailed by the fact that in cold abscesses, lupus vulgaris, keloid, tubercular degenerations of joints and lymphatic glands, and occasionally in tuberculosis of the lungs, the bacillus cannot be found except in its spore stage, requiring animal inoculations for development and recognition. The pathogenic action of the bacillus tuberculosis is so well established that wherever, in the tissues, the bacillus is capable of growth, we find it invariably associated with a formative miliary tubercle or a caseous mass.

Of somewhat less importance, but still of considerable interest and diagnostic value, is the plasmodium malarie, a species of protozoa found in the blood of malarial patients.

Although not belonging to the class of schizomycetes, it yet bears a close analogy to the vegetable parasites. The important point is that this parasite is always found in malarial fevers and in no other affections, thus affording a means of positive diagnosis. The practical value of this diagnostic point is readily conceded when we consider the cases of puerperal septicemia, liver abscess, tubercular affections and typhoid fever that have simulated the paroxysms of malaria. The detection of the parasites requires some familiarity with blood examinations under high powers, but after this is once acquired the examination for the micro-organisms may be done without staining, either at the office or at the bedside.

A number of bacteria, such as the bacillus of anthrax, the bacillus of Asiatic cholera, the micrococcus of alopecia areata, the bacillus of glanders, the spirillum of relapsing fever, and various sarcine present sufficient morphological peculiarities, when found in the secretions, to materially assist, when considered in connection with the group of symptoms produced, in arriving at a correct diagnosis. When facilities for cultivation of bacteria in different media is afforded, the list can, of course, be extended very considerably, but few physicians care to devote the time and study requisite for such work.

As a logical consequence of the acceptance of the germ-theory of disease, we find old-school therapeutics undergoing a gradual revolution. Having ascertained that the mechanical presence of the microbes is less deleterious than their secretions, internal antiseptics are being discarded, and search is made for antidotes to bacterial toxins. Chemistry has turned a deaf ear to the pleadings of scientists, and after failing to produce synthetically effective antidotes, dependence is made upon vital phenomena. Mother Nature, always kind and beneficent, has shown a disposition to aid the prying gentlemen into the ways of life and truth, and so produces the coveted substance whenever appealed to. The antitoxins, or "alexines," thus obtained prove perfect antidotes to the toxins in the test-tube, and quite frequently in the animal body as well. Incidentally it was discovered that when toxins are heated their power of producing antitoxins is increased, and so antipyretics received a fatal blow. An analysis of the pathogenic agents—the bacterial products—which have this power of in-

ducing a production of their antitoxins by the reactive forces of the body shows them to consist of albumoses, alkaloids and peptones, compounds closely allied to the same substances found in poisons of other origin, as snake-venom, strychnine, atropine, picrotoxin, etc. The question arises, Why could not the production of the same antitoxins be accelerated within the body of the patient by the administration of non-bacterial poisons capable of producing in the healthy body a group of symptoms exactly similar to those of the disease, and so avoid the dangers of inoculations with animal products? Verily, the medical world does move, and its eccentric revolutions are becoming more and more adjusted to a fixed centre of progress—the law *similia similibus curantur*.

HOW MAY THE GENERAL PRACTITIONER CONFORM TO THE RULES OF ASEPTIC MIDWIFERY?

BY THEODORE J. GRAMM, M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the Twenty-third Ward, on February 17, 1897.)

THE necessity for asepsis and antisepsis in midwifery is imperative. There is no longer any question concerning this necessity. The innumerable series of extended investigations concerning septic infection in obstetrics made abroad leave no longer any excuse for any one to practice midwifery without the most respectful and conscientious regard for these demonstrated truths, for they prove beyond the possibility of doubt that puerperal infection is *wound infection*. This analogy has been drawn many times before; the idea is intimately associated with the earliest discovery of the aetiology of puerperal infection in 1847 by Semmelweis. From him this conception was disseminated over England and was incorrectly ascribed to Sir J. Y. Simpson, even by Spiegelberg, who should have known better. The idea has been promulgated and forgotten repeatedly and successively. In the confusion which necessarily resulted from forgetting that proposition that puerperal infection is only wound infection, so frequently reiterated

abroad, obstetricians were divided as to the ætiology in the most grievous manner, and wondered whether puerperal fever was a single disease of specific character, or how the various manifestations sometimes seen were to be explained. And yet take for example what Fritsch wrote in 1876: "The diseases of the puerperal woman associated with fever are accidental wound diseases," etc. "It is no longer tenable to include in the ætiological factors of puerperal fever, physical deficiency, depression of mind, taking cold, irritation from difficult labor, excitement, individual or epidemic disposition, telluric or cosmic influences, or 'family scenes.' All this is not poison. Hunger, sorrow and pain do not produce septicæmia."*

The facts there stated derive their importance by reason of containing the key-note with reference to the prophylactic and therapeutic treatment. If we lose our firm grasp upon the proposition under discussion, we are left in confusion. Remembering this proposition emphasizes to us how close is the analogy and how absolutely necessary is the application of surgical, that is, antiseptic measures, in obstetric practice; for have not recent surgical successes demonstrated the value of the antiseptic method? Obstetrics has given the antiseptic method to surgery; and yet the paradox presents of obstetricians learning the value of antiseptic measures from surgeons. Fritsch said, puerperal fever is to be treated simply according to the usual rules of surgery. I wish I could emphasize these facts, for they are of incalculable importance.

The question now arises, what is meant by septic infection? Must our patient die before we will acknowledge that we have had an infected obstetric case? Infection is a matter of degrees. It is true, many cases have died of what physicians were willing to acknowledge was puerperal fever. But innumerable cases have occurred where the woman has not had a good convalescence. Many of these were likewise cases of septic infection. It is an undeniable fact that in consequence of preventable infection, there are many cases of endometritis, subinvolution, inflammation of the tubes, of the ovary, abscess or induration in the broad ligament, which have brought in their train ill health, chronic invalidism, and the tragedies of social life, not to speak

* Heinrich Fritsch: Ueber das Puerperalfieber u. dessen locale Behandlung. *Samml. Clin. Vorträge*. No. 107.

of general and localized peritonitis and metastatic abscess, or general septicæmia.

In the present day there is a division made of puerperal cases, theoretical, it is true, and yet of admirable practical value. Reports are recorded of percentages of *morbidity* and mortality. The puerperal period is spoken of as normal, disturbed, and abnormal. In the first, the temperature never rises above 100° F. In the disturbed puerperal period the temperature may rise to 102° F., and when the case is manifestly abnormal, the temperature is higher. The latter two of these three divisions are infected cases; the difference is only in degree and in kind of infection.

What is the origin of this infection? Human progress is slow, and it sometimes appears that progress in medicine is slower still than in any of the phases of human activity. By means of a long series of investigations, by slow, painful steps in scientific research, we have at length attained to the fact that the infection from which so many puerperal women have lost their lives in former times, and occasionally do yet, comes from without her body—that, in the course of the ministrations to aid her in the hour of her travail of soul and body, given by the obstetrician, the poison has been introduced into her system. Appreciating the full import of this fact, must we not marvel at the arrogant impudence of one who questions that the value and dignity of our profession can be so compromised that “we can ever become, especially to women under the extremely interesting circumstances of gestation and parturition, the minister of evil; that you can ever convey, in any possible manner, a horrible virus so destructive in its effects, and so mysterious in its operations as that attributed to puerperal fever”? Or shall we rather marvel that the awakened conscience has not oftener led physicians to a tragic end, as in the case of Michaelis, who took his own life by casting himself before an approaching train, for whom there was no peace of mind after the horrible (shall we say?) revelations of Semmelweis suggested that he was the cause of the death of his young relative? It were well could we “lay this flattering unction to our souls” that autoinfection is a frequent aetiological factor. Unfortunately scientific investigation has demonstrated that more than 95 per cent. of cases become infected

from without, and of the small per cent. which do not thus originate, the course of the infection is mild and usually terminates without manipulative interference, as recorded by Saft and Baum.*

It has been shown that the infecting matters—that is, micro-organisms—have been carried into the genital tract by the examining finger, by the instruments used in the delivery, by the douche-nozzle, by the unclean hands of the nurse, by unclean vulvar pads, by unclean utensils used in nursing, and occasionally by the atmosphere permitted to be laden with septic germs. This enumeration of the sources of septic infection should be sufficient to guard against the possibility of their injurious action. Above all must we be dominated by an ever-present conviction of the necessity for these prophylactic means. I cannot emphasize this too frequently.

It has been thoughtlessly suggested that the general practitioner does not possess the opportunity or the means of conforming to the rules of aseptic midwifery. A moment's conscientious thought must reveal the fallacy of this belief. It is not necessary to have at our disposal the beautiful arrangements for sterilizing by steam under pressure, or irrigators made of glass, or the instrument-sterilizer working by the steam-coil, nor the many other conveniences of a hospital operating-room. Wherever may be had hot water, washing-soda, soap, a finger-brush, an oven, permanganate of potash and oxalic acid, bichloride tablets, a clean white duck coat *and* an aseptic conscience, there may aseptic conditions be obtained.

The sterilization of the hands is a much-debated question. For the present we will not be far off from that much-desired condition if, in the first place, we refrain as far as possible from coming in contact with septic matter when we believe that we may shortly be called upon to deliver a woman in confinement. If then the hands be thoroughly scrubbed in soap and water, then partly dried, and the finger-nails carefully cleaned with a finger-knife and nail-file, and then scrubbed again vigorously with soap and water, we shall already have taken a considerable step towards asepsis. The use of permanganate of potash and oxalic acid in private practice is far less troublesome than at first

* *Archiv. für Gynokologie*, Bd. 52 H. 3.

appears. A small quantity of each salt may be carried in the obstetrical bag, from which the solutions may be made when required. The bichloride of mercury, in tablet form, furnishes a convenient means for making the required solutions. The hands thus prepared, after being wet, may be considered as practically unlikely to infect the puerperal woman. The use of ointments is to be deprecated. The hands dripping with bichloride solution are less liable to carry infection than the finger anointed from a jar of any ointment whatever. Creolin solution, leaving the hands slippery, is perhaps better than bichloride, in addition to not being poisonous, as is the bichloride solution. It is worthy of note that the application of bichloride solution in no way resembles a religious rite, as some appear to suppose from the brief time devoted to its application; but, on the contrary, a definite chemical reaction must take place. A definite chemical action must take place between the bichloride and any germs present, for which sufficient time—say from three to five minutes—must be allowed.

Personal cleanliness, as ordinarily understood, is imperative. A full bath and particular attention to the hair and beard are absolutely necessary, together with a complete change of clothing, if recent contact occurred with a contagious or infectious disease. Denman, in 1807, already recommended relinquishing obstetric practice while treating such diseases. This may not be necessary, provided the proper disinfection of the body be effected. A clean white duck coat is far better in appearance than the undignified and dangerous practice of attending "in shirt-sleeves." It has been objected that the white duck coat in private practice is too suggestive of a surgical operation. Its more frequent use would overcome that objection. It certainly is far more cleanly, both for physician and patient, and more suggestive of cleanliness, than the rolled-up shirt-sleeves, the sweaty axilla and the array of professional requisites peeping from the upper vest-pocket, not to speak of the abundant collection of dust, horse-hair, epithelial scales and the varied assortment of micro-organisms which a good immersion-lens would reveal, could it be applied to the ordinarily clean clothing of most physicians.

Instruments may be best cleaned by boiling in a 1 per cent. solution of common washing-soda. The irrigator-nozzle, should

this be required, should likewise be boiled with the instruments.

Probably no subject has excited more debate than the prophylactic vaginal douche. It is now very generally believed to be not requisite in ordinary cases wherein there is no manifest condition of infective disease. The external genitals, however, should receive attention. The hair about the perinæum and the lower part of the pubic region should be cut close with scissors, and this region repeatedly washed with soap and water, and then washed with clean water, and finally an antiseptic solution—be that either creolin, carbolic acid or bichloride—applied.

How can we obtain sterile dressings in a private house or in the humble home of the poor? Poverty and dirt are not inseparable in the presence of intelligent effort to the contrary. The vulva-pads, made of cheese-cloth, purchasable at five cents per yard, and folded to the required size, or pieces of old linen, which *must* be clean and suitably folded for use, if placed within a towel or piece of muslin, and again wrapped in paper, may be sterilized by being placed in an ordinary heated oven. Heat sufficient to char the paper is probably sufficient to sterilize the bundle of vulva-pads. These pads, after being removed from the oven, must be kept wrapped up and protected from dust and handling by unclean hands. A large variety of material is useful for the vulva-dressing: Cheese-cloth and cotton, jute in cheese-cloth, bichloride, or salicylated or borated gauze or cotton may be used. The Arnold steam sterilizer, where obtainable, is, of course, an advantageous means of sterilization.

The douche after labor, and its indications for use, cannot be touched upon at present. Under all circumstances the external genitals should be washed off several times a day with an antiseptic solution. This should be the rule in all cases. This suggestion rests upon the fact that the lochial discharge is a fluid which readily takes on fermentative changes and furnishes a good culture-medium for the more virulent micro-organisms.

It is hardly necessary to say that all the rules of the antiseptic method applicable to the obstetrician should be carried out with equal rigidity by the nurse. Violations of the antiseptic methods on the part of the nurse have doubtless been the cause of many cases of infection.

I am not unmindful that much more should be said concerning the details of the suggestions made. It is true that with small expense this method may be carried out with even greater exactness. My object is served if I have succeeded in demonstrating that the antiseptic method may be carried out in all its essential details in the humblest homes, if only the underlying principles of the antiseptic method be thoroughly understood and remembered, and there is a *definite* determination to carry out its requirements.

CRATÆGUS OXYACANTHUS, A NEW HEART REMEDY.—Dr. M. C. Jennings, in the *New York Medical Journal*, October 10, 1896, publishes a number of cases of heart diseases cured, or greatly benefited, by *cratægus oxyacanthus* (hawthorn). He says: "Dr. Green, of Ennis, Ireland, for many years had a reputation for the cure of heart disease that caused patients to flock to him from all parts of the United Kingdom. He cured the most of them, and amassed considerable wealth by means of his secret, for, contrary to the code, he, though a physician in good standing, refused to reveal the remedy to his professional brethren. After his death, about two years ago, his daughter, a Mrs. Graham, revealed the name of the remedy her father had used so successfully. It is *cratægus oxyacanthus*." So much for the history of the remedy. Dr. Jennings procured for himself some of the remedy, and his experience with it explains Dr. Green's national reputation. But, as is usual in their practice, it was given in connection with several remedies, singly or in combinations, so that it is impossible to tell whether it was the *cratægus* or something else that cured. Let us have a proving of it so as to determine the symptoms, that, like digitalis or cactus, will lead to its homœopathic employment in hypertrophy, valvular insufficiency or other organic lesions.—*Mat. Med. Jour.*, June, 1897.

THE MEDICAL TREATMENT OF APPENDICITIS.—Hartman, of Syracuse, mentions six drugs from which he has seen benefit in appendicitis. *Belladonna* is the most useful in the early stages, and will cover more cases than any other remedy. It is useful in the young vascular subjects who are considerably flushed and complain bitterly of the pain, which is rapid in onset and much increased by motion. *Bryonia* is indicated in those cases wherein we get the stitching pain, aggravated by every movement, and which indicates the development of peritonitis. *Rhus tox.* is indicated after *bryonia*, as it comes in when we have the septic condition. *Mercurius* may be prescribed where there is a marked tumor, with evidence of suppuration, and sometimes in the early stage, the tongue having a dirty coating and the constipation being persistent. *Colocynthis* will be found useful when the patient is suffering with appendicular colic; at this time we should not forget *dioscorea*, which is very valuable in this form of colic. Heat applied locally to the diseased part will be of great benefit and of great comfort to the patient.—*Medical Century*, July 1, 1897.

EDITORIAL.

WM. H. BIGLER, A.M., M.D.

WM. W. VAN BAUN, M.D.

THE PRESS AS A BEARER OF CONTAGION.

THIS is an age of iconoclasm. No cherished idol is exempt from attack, and happy is that idol whose feet alone prove to be of clay.

A free press has long been the idol of our American heart, and it is with difficulty that we can be made to recognize the possibility of flaw in its nature or alloy in its composition. It stands towering before us, the idol of the nineteenth century, brilliant in its enterprise and dazzling in its apparent advocacy of right and truth, and yet its feet are of common commercial clay, and the display of its higher attributes depends upon the extent to which these are called for by the public. What the public demands, what the public requires, and, therefore, what the public will pay for, is what the press supplies. While, therefore, the press may in some sense be regarded as the educator of the people and the moulder of public opinion, it is in a much truer sense the reflection only of the public mind, of the public taste.

In this apparently necessary catering to the popular taste lies the great danger of a free press—a danger which, in one particular direction, we would wish here to point out and emphasize.

Man is an inquisitive animal. His whole life is one huge interrogation-mark, the dot below the curve being his death, when all questioning ceases and he pauses for a reply. The smaller number of the newspaper-reading public is concerned with higher questions of eternal moment; the great majority is simply curious—curious about little things. The daily doings of themselves and of their neighbors bound their horizon, and the paper which best satisfies this craving for news items is the most eagerly sought and the most widely read. What is the result? The columns are crammed with the unimportant doings of insignificant people as well as with the trivial details in the lives of distinguished personages. Were this all, we

would, as physicians, have but little concern with it; we could let them gossip fatuously on. When, however, in addition to this, they spread before the public, with all the flowery rhetoric of the penny-a-liner, the details of vice and immorality so often afforded in the records of divorce suits, etc., then, as moralists, we may enter our protest at this familiarization of crime, and seek reform. But when we see the prominence given to items which we well know are sure to act deleteriously upon the mental health, and, through this, upon the physical well-being of the community, then, as guardians of the public weal, as modern prophylactic physicians, our interest should become more lively and our efforts at correction more concerted. Among such dangerous items we class, *e.g.*, the details of the numerous suicides, many of which would, we have no doubt, prove to have been suggested by examples furnished in the daily press. Of the same baneful character are the gruesome particulars of revolting murders, with which the public is at present so generously regaled. It is impossible to say how many cases of hydrophobia are due to the harrowing accounts of supposed cases reported by the over-active "special correspondent." What can be more depressing and more harmful to sweltering humanity than the accentuated reports of the "continued heat," the "torrid wave," the "no relief in sight," the "high temperature," and the "heat prostrations"? All these various items are calculated to spread the very diseases of which they are instances, just as surely as do the various disease-germs demonstrable by microscope and cultures. They are toxins, needing but to be conveyed to a suitable soil in which to germinate and reproduce themselves, and the press as at present conducted is the medium for their dissemination. It is the bearer of a contagion as harmful and as potent as that of any of the infectious diseases, and more dangerous because beyond the reach of physical antisepsis.

The number of such germs usually escapes our notice, but is appalling, even in the best "family papers." We pick up one from our desk, and in the one issue read the following striking headlines: Determined to Die.—Husband and Wife's Desperate Attempt at Suicide.—Stabbed to the Heart.—On Trial for Wife Murder.—California Deputy's Attempt at Suicide.—Stabbed with a Pin.—A Little Girl Beaten to Death.—

Accused of Murder.—Yesterday's Heat will Continue.—Five Prostrations.—Heat Great in Colorado.—Seven Deaths in St. Louis.—One Death from Heat in Evansville.—Four Deaths in Chicago.—Indianapolis Still Suffers.—Bicyclist Fatally Sun-struck.—Nine Children's Lives Cut Short.—Hospitals Filled with Heat Victims.—New York's Death Roll is Nine.—Hottest Day of the Season in Omaha.—Temperature 102 Degrees at St. Joseph. Truly a dainty dish to serve with the breakfast! It requires considerable strength of will to remain mentally cool under such a galling fire. During the late "heated term" we all undoubtedly have had cases of heat prostration, if not produced, at least intensified, by the contagious influence of these notices in the daily press, even if we have not been brought into direct contact with suicides or murders by infection.

But what are we going to do about it? Germicides are evidently out of place. All we can do is to seek to render the soil unfit for harboring such disease-producing germs by educating the public to take a healthy, common-sense view of the situation. We must endeavor to weaken its confidence in the unselfishness of the press (provided it ever had any), and teach it that what it reads, even if true, is not the utterance of an infallible oracle, but the newsy gossip of a great, big idol with feet of clay.

THE BUFFALO MEETING.

THE fifty-third annual session of the American Institute of Homœopathy held at Buffalo, N. Y., during the last week of June was successful in every respect, and was particularly enjoyable to the visiting members. The local committee was a bountiful provider, and the Institute was well taken care of, nothing being permitted to interfere with its business or scientific work. President Custis presided with grace and dignity, and ruled in an able and impartial manner, keeping the business well in hand and never permitting it to encroach upon the time of the sectional meetings, one of the most remarkable features being that nothing was permitted to drag. The attendance was large, and about one hundred and fifty new members

were elected. The social attention was ample; in fact the local committee was prodigal in its efforts. The large receptions given by Drs. Wright and Cook and the Niagara gorge ride were thoroughly appreciated.

The sessions of the materia medica conference preceding the Institute meeting repeated the Detroit success. The main question discussed was the position in the materia medica which should be properly accorded to results obtained by a single experimenter only, and the consensus of opinion was, First, That it is advantageous and desirable to distinguish those symptomatic effects which have clearly demonstrated their pathogenetic origin, and Secondly, That it is necessary and essential that other symptoms not possessing this quality of pathogenetic certainty should be retained and kept in such form and relation as to be readily accessible to the practitioner. This was a step in the right direction, and it begins to unify the line of action in materia medica reformation.

The sessions of the new Ophthalmological, Otological and Laryngological Society brought together a large number of physicians interested in these specialties, who remained over for the Institute, and added greatly to the success of the Buffalo meeting. The placing of the section of O., O. and L. at the end of the roster a week after the meeting of the Society should be avoided in the future, if possible. It should follow the day after the adjournment of the Society.

The Institute meetings are too long-drawn-out, and as few members care to devote ten days to these annual reunions, they come and go according to the sectional meetings. It would be well if the meetings could be condensed into four days, so that all the members could be present at the same time and derive the benefit of the inspiration of large numbers, which is at present lost. This end could be reached by grouping the sections so as not to conflict too radically—by placing materia medica, clinical medicine, paedology and neurology in one group, and ophthalmology, surgery, gynæcology and obstetrics in another, and allowing the two groups to be in continuous session the entire four days, dividing up the time of each group according to the importance of the section. It is simply a question of numbers. With five hundred members in attendance it could be done successfully. When the Institute meets at At-

lantic City in 1899 there will be more than five hundred physicians present, and it will make a good experimental year.

The Interstate Committee was well represented and did good work in planning for the future. The Intercollegiate Committee continued its sphere of usefulness, and in determining to advocate the endowment of certain departments in all our colleges—such as biology, chemistry, physiology, etc.—it has advanced in the right direction, and sooner or later means will be found to accomplish the purpose. Where there is a will there is a way.

The president in his address called attention to the action of the Association of American Medical Colleges at its recent meeting in Philadelphia. It is embodied in the following resolution:

“Colleges, members of this Association, are free to give to students who have met the entrance requirements of the Association additional credit for the time on the four years’ course, as follows: A, to students having the A.B., B.S., or equivalent degrees from reputable literary colleges, one year of time. B, to graduates and students of homœopathic or eclectic medicine, as many years as they have attended those colleges. C, to graduates of reputable colleges of dentistry, pharmacy and veterinary medicine, one year of time.”

In reference to this action of the Association of old-school colleges in throwing off the first year of a four-year graded medical course for those students who have the A.B., B.S. or equivalent degree, the Hahnemann Medical College of Philadelphia adopted this plan a few years ago, but after one year’s experience abandoned it, and has since required, in addition to the degree of Arts, Science or Philosophy, the series of studies known as the preparatory medical course, as is now given in a few of our best universities, as the requirement necessary to admit to the second year of her medical course.

The Association of State Medical Examiners took up the questions of uniformity of the *minimum* requirements, admitting candidates to enter upon a collegiate medical course, and the uniformity of State examinations of candidates for license to practice medicine, with special reference to a reciprocity in State license. The wide differences between the now existing State laws governing the licensing of physicians make this appear

almost a hopeless task, but a well-established determination to reach the desired end will surely open up the way, and the Association is to be commended for its effort.

The paper presented by Dr. J. M. Lee, of Rochester, N. Y., advocating this line of action was able and in the right direction, but his facts in regard to Pennsylvania's standard were absolutely wrong, and we trust they will be corrected before publication. The standard of the Pennsylvania examination for granting license to practice is much higher than that of New York; while, on the other hand, New York's preliminary requirements of the candidate before entering upon his medical education is higher than that of Pennsylvania. There should be but little difficulty in harmonizing the differences of these two States so that the license of one shall be acceptable to the other.

While uniformity is the order of the day, would it not be well for the American Institute to establish a uniformity of title for all these collateral associations and call them the American Institute's Interstate Committee, the American Institute's Intercollegiate Committee, the American Institute's Association of Medical Examiners, the American Institute's *Materia Medica* Conference, etc. ?—thus placing indelibly the stamp of the American Institute upon every organization emanating from or recognized by the Institute.

The Institute unanimously adopted the recommendation of President Custis to establish the American Institute's International Bureau of Homœopathy at Washington, D. C., for the purpose of strengthening the school at home and abroad, and for the collection of valuable information. This was a deserved compliment to the worth of the president; and to emphasize its appreciation of his merit, the Institute insisted upon Dr. Custis becoming the first chairman of this bureau.

The character of the sectional or scientific work was of a high order, as will be shown in the pages of our journals in the next two or three months.

The Institute honored itself in calling Dr. Wright to the presidency, and its action was wise in deciding to go to Omaha for the 1898 meeting.

The alumni reunions were successful and had a twofold pur-

pose—relaxation, and the establishment of good-fellowship and generous rivalry between similar institutions.

The *entente cordiale* of the Philadelphia and New York colleges could not be doubted, and these institutions united in reaching out to bind with the same friendly bonds the western tier of colleges.

Taken all in all, the Buffalo meeting will go down in American Institute history as ranking high among the successful ones.

A SIGN OF THE TIMES.

THE action of the *Association of Medical Colleges*, at its last meeting at Philadelphia, is worthy of note and commendation, and no doubt will receive plenty of both as soon as the medical profession has recovered from the surprise which it has naturally caused. The resolution adopted was as follows:

“Colleges, members of this Association, are free to give to students who have met the entrance requirements of the Association additional credit for time on the four years’ course as follows: 1st. To students having the A.B., B.S. or equivalent degrees from reputable literary colleges, one year of time. 2d. To graduates and students of homœopathic and eclectic medicine as many years as they attended these colleges. 3d. To graduates of reputable colleges of dentistry, pharmacy and veterinary medicine, one year of time.” Our interest centres particularly in the second section. As will be seen, there is an ambiguity in the text which admits readily of a construction hardly intended. According to it any college of the Association would be hereby justified in admitting to *graduation* any homœopathic graduate or student who had completed four years in a homœopathic college. Their four years would be allowed to count as four years, and they would therefore be of the same standing as their own students, who were ready to take their final examination and receive their degrees. Of course this can hardly be the intention of the resolution, although the words mean that.

It is a wonderful step in advance that, according to this authoritative announcement, the homœopathic curriculum has

come to be regarded as practically equivalent, year for year, to that of the "old schools," and there can no longer be any excuse for the unjust discrimination against colleges not "regular." Surely we could wish for no fuller recognition of equality. We have also in this action an additional argument in our favor when we repeat our demands—as we trust will be done, again and again—for recognition in the military and naval service of the United States. It virtually does away with the time-honored but absurd terms "regular" and "irregular," as applied to colleges, and it will need but a few years to see them vanish from the vocabulary of educated men as applied to methods of practice.

Although this action may be a bid for homœopathic students, as is suggested by the N. A. J. of H., it will not prove a very formidable bugbear to our colleges, since it greets the student at the wrong end of his course. One who has determined to practice homœopathy will surely desire the diploma of a homœopathic college, and will, therefore, not finish his studies in an allopathic college, under which circumstances alone the provision would be of any special benefit. Some in the past have unfortunately begun their studies in allopathic schools, thinking there to find advantages which our own were not able to offer. To those who, in the future, may be contemplating a like course, this action of the Association will furnish food for thought, since they see from it that, in the eyes of those not inclined to be too lenient judges, the equivalence of the respective curricula is established. At any rate—and this is the main consideration—another step has been taken in the direction of true liberality of thought and unsectarian pursuit of knowledge by those from whom it could least have been expected.

BRYONIA IN GASTRIC DERANGEMENTS.—Especially in summer and damp weather; for dry tongue, coated white or yellow, and covered with blisters; thirst night and day, with sensation of dryness in the mouth and throat; putrid smell from the mouth; *bitter taste*, especially on waking, or pappy, flat, foul taste; aversion to solid food, with desire for wine, acids or coffee; frequent ineffectual attempts at vomiting; or else bilious vomiting, especially after drinking; tension and fulness in the region of the stomach, especially after eating; constipation; dulness of the head, with vertigo, or burning, oppressive or distensive pain in the head; worse after drinking; chilliness and shuddering.

GLEANINGS.

DIAGNOSIS OF HÆMATEMESIS.—Dr. Albert Robin dwells on the importance of determining the source of the hæmorrhage in vomiting of blood. In the majority of *vast hæmorrhages* an ulcer is the cause; then follows cancer. Occasionally a profuse hæmorrhage *may be* the first symptom of a latent cancer of the stomach. Some liver diseases, as cirrhosis, at times give rise to a violent hæmorrhage; at the same time the other symptoms of cirrhosis may be but little pronounced. On the whole, morbid states with stasis in the portal system may be accompanied by pronounced gastric hæmorrhages.

At the same time it is well to recollect that a hæmatemesis may appear with an incarcerated hernia or uræmia. Often enough the uræmia is overlooked, as only a gastric affection is thought to be present. With small hæmorrhages one should first think of cancer. But one should not forget that ulceration of the mucous membrane of the stomach may occur with chronic gastritis, and a clinical picture result that wholly resembles cancer. Therefore, one should diagnose cancer when one is forced to do so.—*Norsk Magazin for Lægevidenskaben*, No. 4, 1897. Osler—*Practice of Medicine*, p. 354—mentions that cases of chronic gastritis with atrophy of the mucous membrane of the stomach may be associated with an aggravated chronic dyspepsia, often of such severity that cancer is suspected. In one of the cases which he had examined the persistent distress after eating, the vomiting, and the gradual loss of flesh and strength very naturally led to this diagnosis, but the duration of the disease far exceeded that of ordinary carcinoma. Goodno—*Practice of Medicine*, vol. ii., p. 554—points out that in cancer it is quite common to have a history of a sudden and complete loss of appetite. I have noticed this in one case recently.—*Trans.*

FRANK H. PRITCHARD, M.D.

THE TREATMENT OF GASTRIC ULCERS AFTER HÆMORRHAGE.—Charles O'Donovan, M.D., Baltimore, Md., after reviewing the general treatment of such cases, and citing a number of cases from practice, arrives at the conclusion that where the hæmorrhage is repeated, the patient growing rapidly worse, laparotomy should be performed. He thus remarks: "Is one justified in standing by with folded hands and awaiting the end with uncertainty? Does not modern surgery still offer a hope after medicinal means have proven ineffectual? Or should we wait that long? How far can we safely go in such dilatory treatment? I feel that there is a point in these cases where the surgeon should interfere. I recognize the fact that the large majority of the patients get well with careful diet and attention to the proper details of treatment, but some cases do not end so fortunately, and these cases we must try to save by laparotomy." This treatment he believes to be particularly applicable to cases presenting profuse hæmorrhages after periods of apparent cure occurring in chlorotic or otherwise unhealthy individuals in whom the ulcer persists or perhaps grows larger in spite of the cessation of hæmorrhage.

until some strain or excess or extension of the erosion gives rise to another bleeding. The patient may be unable or unwilling to conform to the necessary regimen of rest and diet for the time required for the reasonable assumption of a cure, and so, after an indefinite time, more or less long, the whole train of symptoms recurs, leaving the individual in a worse plight than after the previous hæmorrhage. He believes that in such recurring cases where anything interferes with the proper treatment over a sufficient time for complete healing of the ulcer, we can save our patients only by surgical procedure. The condition seems very similar to that which exists in recurring appendicitis, and calls as strongly for interference. The operation may be somewhat more difficult and dangerous, but he feels that the almost certain recurrence and constant danger to life, growing each time more pronounced, make the operation not only justifiable, but imperatively demanded. As for the danger, let the operation be but recognized and gain some vogue, and the technique will rapidly develop and danger diminish. This may safely be left to the surgeon.—*New York Medical Journal*, July 10th.

SOME REMARKS ON PROCTALGIA.—Conrad Wesselhoeft, M.D., speaking of this disease, says there is no strong evidence that proctalgia, neuralgia of the rectum in its lower portions, surrounded by the sphincter, has ever been considered as a definite form of neuralgia without local, tangible lesions. It appears that proctalgia, while here and there mentioned as a symptom of other disease, is not looked upon as a variety of neuralgia peculiar to itself. He regards it as such—namely, as a neuralgia of the sentient nerves supplying the rectum. Its usual association with constipation has led to the belief that this is the cause of it, while a more circumspect view of neuralgic proctalgia permits the conclusion that the pain causes the constipation by preventing the patient from making an effort at defecation. He cites a number of cases to prove his conclusions, in none of which was there associated any palpable rectal disease, such as hæmorrhoids, fissure, ulceration, malignant or otherwise, and the recta, carefully inspected, ocularly and otherwise, always appeared perfectly normal. In pure neuralgias of this kind there is no roughness nor swelling of the tissues, and all feel perfectly normal to the exploring finger. The only resistance encountered is the rigid contraction of the sphincter, making examination under ether often necessary. The principal remedies he has found useful are belladonna (or, as he prefers to use it, atropia sulph.), nux vomica (strychnia sulph.), croton tiglium, and others. He uses these in the second to fifth dilution or trituration, and aids their effect by appropriate diet, such as omission of excess of starchy food and meats, substituting more fruits and succulent vegetables. Cathartics and the habitual enemas, which are frequent causes of proctalgia, are inadmissible.—*New England Medical Gazette*, July.

A CASE OF RETENTION OF URINE SIMULATING PREGNANCY AT TERM.—Dr. G. M. Boyd, Philadelphia, reports the following case: Mrs. R., multipara, aged 43 years, was brought to the hospital in an ambulance. She had been under the care of a midwife, who supposed her patient to be in labor at term. She stated the midwife had ruptured the membranes. The labor not progressing satisfactorily, the midwife sent her to the hospital. From her size the patient appeared to be pregnant at term. The abdomen was so swol-

len that any attempt at palpation was impossible. Both her legs were swollen, painful and œdematous. On examining the patient internally, nothing could be felt except a fulness, due apparently to a cystic tumor which displaced the cervix. A small amount of urine was voided in this examination, due probably to pressure on the urethra. The patient's general condition showed evidence of acute uræmia. She had a strong, full pulse, some headache and disturbed vision, difficulty in breathing, and pain about the heart. The house physician, deciding that the tumor was not in the uterus, passed a catheter. Urine flowed freely until four quarts had been passed. It was now deemed wise to stop. In eight hours the catheter was again passed, and three quarts withdrawn; in another eight hours three and a half quarts were withdrawn. The œdema, in the meantime, was rapidly disappearing. At the end of twenty-four hours the bladder was completely emptied for the first time. The total amount removed during this time was three gallons and three quarts. On the fourth day she gained control of the bladder, since which time she has exhibited no evidence of polyurea, the amount voided each day being about forty-five ounces. An inquiry into the origin of this great retention gave the following facts: About a month prior to her admission she had had some pain in the small of the back, extending around to the region of the bladder. This became so great that she could not stand erect, and also could not empty the bladder. The only cause that could be obtained for the retention was that, being very poor, she went about the streets begging. When she wanted to empty the bladder no opportunity offered itself, and then, on reaching home, the desire was gone. Having missed her period for two months, and growing large so rapidly, she believed herself pregnant at term. An analyses of the urine showed the following result: Color, pale straw; odor, characteristic; reaction, alkaline; specific gravity, 1005; albumin, absent; sugar, absent; sulphates and chlorides in excess; phosphates, decreased; urea, decreased; total solids, 1.165 per cent.—*American Gynec. and Obstet. Journal*.
W. D. CARTER, M.D.

HYOSCYAMINE IN PARALYSIS AGITANS.—For this most troublesome and intractable disease, hyoscyamine is coming to the front with promise of relief for a disease which has long been looked upon as a *bête noir* of our profession. Notwithstanding favorable results from the administration of a remedy by no means justifies a claim for it as a specific, yet the experience of Dr. Chalmers, of Chicago, as given in the *New York Medical Journal*, everyone of three well-marked cases is a sufficient warrant for a test of hyoscyamine in similar cases. The first case was that of a clergyman where the shaking of the head and the right upper and lower extremity had been on the increase for four years. A drop of solution of hydrobromate of hyoscyamine, two grains to the ounce, was put into the eye. In twenty minutes the shaking had entirely ceased, and at the end of three-quarters of an hour speech was difficult and the patient was unable to rise from his chair. This partial paralysis gradually disappeared, there being no return of the shaking for several hours. In this case, as in the other, the use of a solution of one grain to the ounce was sufficient, applied at stated times, to keep the patient entirely comfortable. Even a temporary relief obtained without injury to the system will be hailed with gratitude.—*N. Y. Medical Times*, July, 1897.

F. MORTIMER LAWRENCE, M.D.

RUPTURE OF THE APPENDIX INTO THE BLADDER.—Dr. Love tells of a case which Dr. Keen recently operated. Three years ago a young man had what his physicians supposed to be a prostatic abscess, followed by the escape of fecal matter into the bladder, and followed by cystitis and double orchitis. When he came under Dr. Keen's care the bladder was distended with air and the perinæum bulging. A transverse incision was made in the perinæum four inches deep, but no fistula was found. Later the abdomen was opened, and a very long appendix was found, the apex of which was in the recto-vesical fold, just behind the prostate. The apex was fused to the bladder and opened into it. The middle portion of the appendix was cut out and the two ends invaginated.—*Medical Mirror*.

REMARKS ON APPENDICITIS.—Dr. Hunter McGuire presented to the Medical Association of Georgia the report of his cases of appendicitis for the last year, 26 in all—13 males and 13 females. There was one death. In his general analysis of the cases he insists on the importance, where it is possible, of operating in the quiescent stage. In fulminating cases he recommends immediate operation. Of all the cardinal symptoms temperature is the least reliable, though a high temperature shows that serious changes are probably taking place. The most important symptom to note is the pulse. In fulminating appendicitis, or in cases where pus or gangrene is present, saline purging is silly and mischievous; in an ordinary case, where all the urgent symptoms more or less subside, but do not disappear, salines are as valuable as quinine in malaria or arsenic in neuralgia. He reports two operations for appendicitis in pregnant women. Both recovered, and neither miscarried.—*Virginia Medical Semi-Monthly*.

F. WALTER BRIERLY, M.D.

CRANIECTOMY FOR BRAIN SYPHILIS.—Laplace, in a paper read before the American Medical Association, refers to the many cases of brain disease directly associated with syphilis which persistently refuse to improve under the specific treatment. They manifest themselves in mental hebetude and paresis. He has had opportunity of treating five such cases. In each, being assured of the presence of syphilis, and having ascertained that the patient had had the full benefit of mercurial treatment, he did the anterior craniectomy, separated the adhesions which had formed between the dura and skull, opened the dura, packed and closed the wound. Two days after the operation the patient was placed on the specific treatment, and the symptoms now disappeared under its influence.—*Med. and Surg. Reporter*, June 26, 1897.

THE VAGINAL TOTAL EXTIRPATION OF THE UTERUS AND THE APPENDAGES ON ACCOUNT OF SEVERE CHRONIC DISEASES OF THE SAME.—LEOPOLD.—The preparatory cleansing is exactly the same as in total extirpation for myoma or carcinoma. If the vagina is too narrow it is incised deeply along the left side, and the bleeding vessels compressed by the speculum on the posterior wall, or ligated if the hæmorrhage is severe. A second incision on the opposite side is unnecessary, though the first incision may be extended up to the incision around the cervix.

The dissection of the bladder up from the cervix is seldom difficult. There may be considerable hæmorrhage from the loose connective tissue, especially in cases of sub-cutaneous inflammation. Fine ligatures are applied, which takes but little time and gives a much better view of the field of operation.

If the bladder is dissected up sufficiently far to expose both sides of the

perimetrium, the accessibility of the cul-de-sac of Douglas is tested by raising up the crescent-shaped fold. If it is adherent, the index finger in the loose connective tissue is pressed as far back as possible, close on the posterior wall, so that the parametric tissue is brought into view in the shape of a broad fold. Small portions of the broad ligaments are now ligated with an aneurysm needle, first on the right, then on the left, and divided next to the uterus, and the ends of the ligatures are laid out on each side over the gluteal muscles. This process of ligation under the direction of the index finger is continued upwards close to the uterus on either side, until there is a chain of three or four ligatures, the upper ligature including the stump of the ligated tissue below it as an extra precaution against hæmorrhage, and then another attempt is made to reach the cul-de-sac of Douglas on its upper sides through a small slit in the peritonæum close to a ligature. If successful, both folds of the peritonæum can be pressed forward on the index finger; but if unsuccessful, examine very carefully to ascertain how high up the uterus is adherent with the rectum, and how near the latter lies to the field of operation. If any injury to it is feared the operator continues to ligate further up, keeping close to the uterine muscle until the uterine arteries are ligated on both sides. Portions of the tumor may meantime appear in the field of operation, or the finger may break through the wall of a pus cavity. This is to be avoided, however, until the uterus is freed. The cavity broken into should be thoroughly washed out with sterile water, after which the operator will proceed with the ligations as before, the opening into the pus cavity being clamped with a pair of forceps to prevent the further escape of pus. The adhesions are often firm, and when the size of a lead-pencil should be ligated with a blunt aneurysm needle, but the ligatures should not be drawn very tight, as the tissue is soft and easily cut by the suture. The tubes are finally reached and the uterus separated from its connections. Splitting the uterus longitudinally is rarely necessary. Especial care is necessary in ligating the upper portions of the broad ligaments, particularly the tube and the ovarian ligament. The remaining portion of the broad ligament is supported on the left index finger, and the operator, passing the aneurysm needle, with a double thread, from beneath up through the mesosalpinx, cuts the loop of the double ligature, ties one end about the lower portion of the tissue and the other about the tube, including the spermatic artery. Another ligature is now put around the stump for additional security before the former are cut off.

After the uterus has been removed and the ligatures have been laid right and left over the gluteal muscles, the field of operation is carefully inspected and dried, and the operator and assistant thoroughly wash their hands to remove any traces of pus. The further treatment of the case depends on whether the adnexa are merely chronically inflamed or have developed into pus-sacks. The peeling out of the adnexa requires great patience, as the organs may be rolled fast together and so firmly adherent with the neighboring peritoneal folds that the originally free surface can scarcely be detected. The ligated end of the tube in such cases is seized best with Hegar's clamp and drawn down far enough to be accessible. The forefinger of the left hand, working from underneath, separates the opposing false membranes and loosens the ovary from its adhesions. Firm adhesions with the rectum or with the intestine require very careful separation with the finger and in sight of the operator. Great difficulty may arise if the end of the tube and ovary are thickened,

shortened, and adherent to the sigmoid flexure. Blunt dissection is the safest method in these cases.

If both adnexa have developed into large or small pus-sacks the case must be treated differently. The lower portions of such a sack is pushed forward into the wound cavity by pressure from above and by barricading adjoining parts with sterile gauze sponges, so as to make the sack point and become visible. A small opening is made in it with a knife, the pus flows out and is immediately wiped away, and the parts thoroughly cleansed with sterilized water. It is better to make a small opening which can be closed with a Hegar's clamp immediately after the pus has escaped. The clamp is now used to pull down on the sack, and the operator passes the first and middle finger along its walls to ascertain if it is adherent to the intestine, in which case it must be separated from it. At one point or another above or underneath the pus-sack the false membrane can be gradually separated. One clamp is placed above another as the pus-sack is gradually brought down and a higher place made accessible for the finger, and finally the sack is removed. In all our operations no neighboring organ has been injured, neither the rectum, ureter, nor bladder. After the pus-sacks have been completely removed a ligature is again passed through the mesosalpinx and tied right and left, taking great care that the ligature is external to the walls of any pus-sacks.

The care of the wound cavity and of the stumps is the final act of the operation. The stumps are drawn down into the sides of the wound without strong traction and sewed in the angles, and the anterior and posterior folds of the peritonæum are united by fine silk sutures. Any bleeding places in the vaginal wall are ligated and the wound cavity packed with sterilized gauze after cutting short the ligatures. If there is doubt about all the pus being washed away by the sterilized water, or if it has been brought in contact with a loose cellular tissue, then the peritoneal incision is kept open and packed with sterilized gauze.

The after treatment is very simple. The gauze is removed about the tenth day and the wound is inspected. Most of the ligatures come away spontaneously the fourteenth day and the majority of patients can sit up on the eighteenth to the twentieth day, and are discharged in three weeks. We have lost one patient in fifty-seven operated upon; that is a mortality of 1.7 per cent. It is quite remarkable how very well the patients feel after recovery.

The advantages of the vaginal total extirpation in severe, chronic, purulent, and non-purulent diseases of the adnexa are the following:

1. The complete removal of the diseased organs, without leaving behind an inflamed uterus, which may cause further suffering.
2. The wound cavity is at the lowest portion of peritoneal cavity and the drainage is the best possible.
3. The field of operation even in women who have not borne children can be made quite accessible, though the tubes and ovaries may be as large as a child's head.
4. No abdominal wound and the avoidance of hernia.

5. The operation is not nearly so dangerous as laparotomy, as the intestines do not come into the field of operation. Soiling the intestines above with pus in the vaginal total extirpation is hardly likely to occur, because the firm adhesions at the pelvic brim shut off the peritoneal cavity, so that the operation is almost extra peritoneal.—*Archiv. für Gynekologie*, Bd., 52, H. 3, 1896.

GEORGE R. SOUTHWICK, M.D.

MONTHLY RETROSPECT

OF HOMŒOPATHIC MATERIA MEDICA AND
THERAPEUTICS.

TUBERCULAR MENINGITIS IN CHILDREN AND ITS TREATMENT.—Before the British Homœopathic Society Dr. C. E. Wheeler read a paper with the above title, in the course of which he mentioned the importance of distinguishing a non-tubercular form of meningitis which is often mistaken for the tubercular form, and is characterized by the early appearance of head retraction and the prolonged stupor stage. The possibility of recovery from the true tubercular form, however, is proved by finding evidence of its previous existence in patients dying from other causes years afterwards, as has been done. He mentioned two cases, one which was distinctly palliated by homœopathic treatment though it ended fatally; and the other had been distinctly relieved and was still under treatment. In discussing the homœopathic treatment he mentioned *iodoform* and *zinc. met.* as especially hopeful remedies, and alluded also to *tuberculinum*, *belladonna*, *bryonia*, *hellebore*, and *apix.* He also discussed the surgical treatment. In the course of the ensuing discussion Dr. Madden recommended the use of only the higher dilutions, especially of *calc. carb.* He had seen cases presenting the appearances of tubercular meningitis recover under this drug. Dr. Dyce Brown also added his testimony in favor of *calc. carb.*, 30, and said he had cured cases of this disease with it. Dr. Hughes said he had never cured a case until he tried *calc. carb.*, 30, on Jahr's recommendation, and that case recovered, and he has not lost a case since. He also mentioned a report of seven cases by Dr. Arnulphy in the *Belgian Homœopathic Journal* in which *sulphur* was the chief remedy. Dr. C. Wolston said that he had found *zincum*, 6, most useful, and recommended the hot pack as an excellent palliative adjuvant, but he had not seen a cure. Dr. Neatby mentioned a case of recovery under *iodoform*, 3x, and a case where *oxalic acid* promptly relieved symptoms of meningitis.—*Homœopathic World*, July 1, 1897.

BELLADONNA IN STERILITY.—Many a household is rendered unhappy by the absence of children. This is sometimes owing to the husband and sometimes to the wife, but in many cases it is almost impossible to determine the real cause of the trouble. In these cases Dr. John Harris Jones (Edin.) counsels not to forget the sedative affinity of *belladonna* toward the female sexual organs, and gives his opinion that this drug is followed by more or less benefit in every disease to which these parts are liable, and in married women who, though apparently enjoying the best of health and never suffering from any irregularity of the sexual organs, are yet sterile, the exhibition of *belladonna* for some weeks is so frequently followed by pregnancy as to preclude the occurrence as mere coincidence. Dr. Jones, though advancing no theory in re-

gard to the matter, has noticed that during the exhibition of the drug the external genitals become more relaxed and the os and cervix more pliable and softened.—*N. Y. Medical Times*, July, 1897.

THE ACTION AND USES OF VERATRUM VIRIDE.—Pratt, of Shrewsbury, Mass., reviews the properties of the green hellebore and relates his own clinical experience with the drug. *Veratrum viride* produces intense capillary hyperæmia, congestion and inflammation of the brain, lungs, liver and spinal meninges, with great arterial pressure, a hard, full pulse, and a tongue yellow at the sides with a red streak in the middle. A full, hard pulse, which cannot be obliterated by pressure, is present in nearly all the cases for which *veratrum* is so efficient a remedy. The writer states that in an epidemic of cerebro-spinal meningitis, with opisthotonos, violent fever with stupor and delirium, it, with occasional aid from *gelsemium*, did all that a medicine could do to cure the disease. For severe congestive headaches, especially if fever be present, and nausea and vomiting, which are characteristic of its fevers and congestions, at least of its cerebral variety, it has worked like a charm. In congestive dysmenorrhœa, with great pressure in uterine region, headache, backache, delirium and scanty flow, when not caused by organic obstruction, it will cause a free discharge of the menses, act as a sedative to the nervous system, and quiet the whole disturbance in a short time. For catarrhal fever, with high arterial tension, nausea, vomiting, with intense cephalic congestion, it is often very effective. *Baptisia*, freely given, is another excellent prescription for this condition. When simple continued fever assumes a severe type, or approaches typhoid, *veratrum* is even better than *baptisia*. Typhoid fever at times commences violently, with great cerebral congestion, purplish face, bloodshot eyes, rapid incompressible pulse, and a temperature which is in itself a menace to life: then *veratrum*, rightly used, causes it to assume a milder type. Again, about the third week, the sufferer may seem to be burning up, with severe congestion of the great organs, dry skin and the absence of all the natural secretions of the body; *veratrum* will then bring down the pulse from 120 or 130 per minute to 90 or less, with a moist skin, restful sleep, and the establishment of convalescence, in the first stage of pneumonia no other drug is needed; if used soon enough the disease may even be aborted. The writer also praises the drug as a remedy for inflammatory rheumatism, erysipelas and scarlatina. His usual method of administration in mild cases has been to put one-half drachm of the 1x dilution in two-thirds of a glass of water, and then direct the giving of one teaspoonful every half-hour until relieved; then every hour. In adults with great fever or cerebro-spinal congestion, or in the first stage of pneumonia with active delirium, and in severe congestive dysmenorrhœa, four to five drops of the mother tincture may be added to two-thirds of a glass of water and one teaspoonful given every half-hour until the fever or congestion is relieved.—*N. E. Med. Gazette*, June, 1897.

PHOSPHORUS FOR BACKWARD CHILDREN.—The observation that the use of *phosphorus* in rachitis brought about, even after a short time, an amelioration of symptoms of nervous irritation, and in backward children frequently a marked improvement in their mental condition, led Hartcap (*Munch. Med. Wochenschrift*) to use the remedy in older non-rachitic children with cerebral irritation either congenital or produced by acute or chronic diseases. He also

uses it in children with weak minds, who are mentally and bodily incapacitated for life; further, he finds it of use in cases of headache in children which are due to cerebral anæmia, saying that a great number of children are benefited physically and mentally by the use of *phosphorus*. The dose prescribed ranges from 0.0006 to 0.0005 grammes of *phosphorus* three times a day, an amount about equalling our lx potency.—*N. A. Journal of Homœopathy*, April, 1897.

GELSEMINUM IN MEASLES.—Dewey, of Ann Arbor, thinks that *gelseminum* is, on the whole, a more useful remedy in commencing measles than *aconite*; that is, it is oftener indicated. There is much chilliness, the fever is a prominent symptom, the child is dumpish, apathetic, does not want to be disturbed; there is a watery coryza which excoriates the upper lip and nose, and there is a barking, harsh, croupy cough, with chest soreness and hoarseness. *Gelseminum*, too, has an action on the skin, and may be continued with benefit after the eruption has appeared; there is an itching and redness of the skin, and a decidedly measly eruption produced by it. It has some aching of the limbs, and may be compared with *dulcamara*, but hardly ever need be mistaken for that remedy. *Gelseminum* has more coryza, *dulcamara* more aching. Both may be used in undeveloped eruption; *gelseminum* when there is pain at the base of the brain, high fever and passive brain symptoms; *dulcamara* when occurring from damp, cold air, rainy weather or sudden changes.—*Medical Century*, July 1, 1897.

IRON IN HÆMORRHAGES.—Evans, of Chicago, states that hæmorrhages from all parts of the body have frequently found a curative agent in *ferrum*; epistaxis, hæmoptysis, hæmatemesis, menorrhagia, hæmorrhoidal flow, etc., and in all such instances the blood will be found to be dark in color and passive in character. The menses are either dark and clotted or pale, thin and watery, and the menses are not infrequently irregular or suppressed. The climacteric period with its attendant profuse hæmorrhages and multiform symptomatology, among which sudden flushing is a prominent feature, would seem to suggest its use at this period. This pseudo-anæmia characteristic of *ferrum*, in which the face especially becomes darkly flushed from time to time, is strongly indicative of this remedy; anæmics who have persistent paleness of the face are, therefore, not subjects for the use of this agent. The latter often possess a tubercular tendency which is precipitated into hopeless and rapid phthisis by the use of iron, a fact freely admitted by the authorities of the opposite school.—*The Clinique*, June 15, 1897.

A PROVING OF SULFONAL.—Twenty-five grains of sulfonal were given, and the following day the urine was scanty, brownish-red in color, but free from albumin. Four days later the gait was unsteady, and five days after this there was weakness of the limbs and anesthesia of the legs down to the ankles. Knee-jerks, previously normal, were now difficult to obtain. Weakness increased, the knee-jerks disappeared, incontinence of urine and fæces occurred, and two days later the patient died suddenly. Since the single dose of sulfonal the urine had continued brownish-red with no albumin, but a few altered red-blood corpuscles.—*Hahnemannian Advocate*, June 15, 1897.

THE MEDICAL TREATMENT OF EPILEPSY.—Halbert, of Chicago, concludes an admirable paper upon epilepsy by calling attention to two remedies.

cuprum metallicum and *kali muriaticum*. The former is the most perfect similitum of the epileptic spasm. It, moreover, has a peculiar grouping of symptoms and a periodic tendency similar to the disease. It has a deep-seated action, and therefore pertains to the involvement of brain cells below the neuroglia layer. Thus it is very useful in cases of long standing and in adult subjects. Its powerful influence upon the alimentary canal makes it valuable in the reflex or sensory form. In like manner it controls the violent delirium or the tendency to stupor, and thereby preserves the function of the cortex motor cells. To prevent the sudden explosions of motor force, there must be an equally distributed arterial pressure and a perfect mental inhibition. To stop the paroxysmal frequency the brain structure must be well nourished and the mind must have control. *Cuprum* will do this more satisfactorily than any other remedy. To Prof. Halbert it has been a sheet-anchor in the treatment of old and obstinate cases.

Kali muriaticum is one of the tissue remedies too easily overlooked. Its delicate affinity for the nerve centres makes it a slow-acting remedy. Inasmuch as the physician too frequently seeks palliation in epilepsy, it is not generally employed long enough. Without doubt it preserves the fibrin factor and prevents a tissue metamorphosis. This, he believes, should be the therapeutic aim in treating this disease. It is simple enough to relieve a fit, for it is in itself self-limiting. The real object is to overcome the morbid degeneration. The protoplasmic fibres are surely strengthened by *kali mur.*, and such a condition tends to preserve the brain integrity. When the brain-cells are properly nourished, they can withstand the irritation of the sensory fibrillæ which surround them. This being done, we have made the first advance toward the removal of the cause of the disease. While he does not make the claim of any specific, and while he admits the difficulty in curing this terrible disease, the writer's record-book gives much substantiation of the above statement.—*The Clinique*, June 15, 1897.

THE CURABILITY OF PULMONARY TUBERCULOSIS.—Before the American Medical Association, Borland, of Pittsburg, read a paper on this subject. Evidence was accumulating to show that tuberculosis was not only a universal disease, but the universal disease. Twenty-five per cent. was much too low an estimate of the total number of infections. He quoted autopsy statistics, from which he concluded that fully 50 per cent. of the people were infected at some period of life, two-thirds of them with the pulmonary form. Now, since the total death-rate gave only 14 per cent. as due to tuberculosis, it became evident that the disease was not so very fatal. There must be many spontaneous cures. Not a single antitoxin having been discovered to cure the affection, the physician would do well to make the best of the older methods. Tuberculosis uncomplicated by sepsis could be considered a curable disease in the sense of being held in abeyance, provided the vital resistance of the individual were kept up to the normal standard. Nature has been known to eradicate tuberculosis in a number of instances. Nothing could prevent infection when three conditions are present: Debility, abrasions, tubercle bacilli.—*Medical Record*, July 10, 1897.

RHUS TOX. IN HÆMORRHAGES.—Bright-red blood, aggravation of the symptoms from chagrin or the least emotion; disposition to be angry, uneasy and timid mood; tickling in the chest.

F. MORTIMER LAWRENCE, M.D.

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APPENDICITIS.

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(Read before the American Institute of Homœopathy, June 28, 1897.)

WHEN I presented to this Society, six years ago, a paper on Appendicitis, I felt constrained to make use of the title, "Inflammations of the Right Iliac Fossa;" to-day I must hide behind those who have assigned this subject to me as an apology for its presentation. My sphere, too, has been limited by restricting it to what may interest the Institute as a whole; for this reason technical surgical details must be omitted, as well as a consideration of the morbid changes in and about the appendix and the causes inducing them. I propose to confine myself, therefore, to some points in differential diagnosis and the still disputed question of surgical interference.

The clinical features of acute appendicitis are well known and not easily overlooked if every case of abdominal disturbance, no matter how trivial, be subjected to a physical examination. Thus, there is the history of improper eating, or perhaps exposure to cold, associated with the menstrual period in the female; occasionally over-exertion, particularly in the sedentary, or possibly a direct traumatism. Then, what have been aptly termed the cardinal symptoms: (1.) *Pain*, at first peri-

umbilical or diffuse, but soon referred to the right iliac fossa, unless the appendix points elsewhere. (2.) *Tenderness*, almost always present at the junction of the organ with the cæcum (McBurney's point); sometimes associated with other sore spots corresponding with distal lesions or their products. (3.) *Muscular rigidity*, to corroborate tenderness, which may vary from a local or general boardlike stiffness, to an indistinct, circumscribed muscular tension, or a barely appreciable difference between the two recti at the costal margin. Besides this three-legged stool, as Hering would have termed these cardinal symptoms, are the well-known initial concomitants:—the sudden onset; the coated, flabby and indented tongue; the vomiting, which, when present, is from an overloaded or rebelling stomach; constipation, sometimes preceded by an irritative diarrhœa; distention, usually local in the early "tympanitic tumor," due to atony of the cæcum from an irritated appendix; and, lastly, as might be expected, a moderate temperature rise and pulse acceleration.

To a less extent the same symptoms are present in the sub-acute form, which is far more dangerous because deceptive.

Chronic appendicitis has been divided into the *relapsing* and the *recurring* varieties, and they can be described as presenting a history of previous attacks, with local tenderness in the former instance, and without it in the latter. Along with this history we sometimes find indigestion, alternating diarrhœa and constipation, diffuse or localized abdominal aches, and the long train of symptoms so conveniently dubbed "neurasthenic." If adhesions or encysted pus accumulations are present, a tumor will be felt, and some claim even to be able to recognize slight alterations in the appendix itself by palpation.

While the recognition of the ordinary attack of appendicitis is easy for the alert practitioner, there are varieties and stages of the disease which puzzle everyone. It may not hence be amiss to run over some personal observations illustrating such differential difficulties. A severe attack of appendicitis, or an established peritonitis, seen for the first time, strongly reminds one of acute bowel obstruction; in the latter peristalsis is arrested, then actively reversed; in the former the intestines are paralyzed. As a consequence of such paralysis there is uniform distention, occasionally the rigid retraction of peritoneal

sepsis; actively moving intestinal coils are not seen or felt, and gurgling is scanty or absent; furthermore, the vomiting, with the exception of the initial stomach-cleaning, is a bubbling-over, lacking the projectile character of reversed peristalsis. Such a distinction has been useful in obstructions by a band and from adhesions, in which the sudden onset, a right iliac tumefaction and tenderness suggested appendicitis. The same symptoms were present in three cases of ileo-cæcal intussusception which were recognized by the straining, the mucous and bloody discharge, and the "sausage" with the date of its formation. In one instance a plastic peritonitis originating in a pendent appendix had produced what was thought to be strangulation of a tender, irreducible femoral hernia. Fortunately, careful attention to the cardinal symptoms enabled us to arrive at a correct diagnosis and during the ensuing operation to treat the hernia by the method of Tait. In another patient a kick in the right side had been followed by a severe peritonitis; then came attacks of appendicitis with intermediate tenderness and tumefaction, and finally, a characteristic, slowly progressing, chronic bowel obstruction. The dual diagnosis was verified by finding the entire iliac fossa full of adhesions, matting everything together and gradually occluding the lower ileum, while at the bottom was buried an infected appendix.

More sudden if not more urgent than obstruction, and not wholly unlike severe appendicitis, are some of the intra-abdominal hæmorrhages, with their acute pain, prostration, distention, tenderness and accompanying rigidity. Two cases of ruptured right tubal pregnancy presented many features of appendicitis at first; when operated later on, the appendix was found imbedded in the mass, which may account for the tenderness at its base. The differentiating points were the symptoms of hæmorrhage, the strong probability of pregnancy, with the vaginal discharge, and the soft, early tumor without the history of previous attacks of appendicitis or tubal disease to account for it. A third case, safely watched through the "collapse stage," before long required operation on account of a supervening acute appendicitis, both lesions being simultaneously removed. The history of previous severe attacks of appendicitis complicated the diagnosis. In a fourth, a ruptured abdominal pregnancy seen when moribund, an autopsy was necessary to explain the causative condition.

Equally sudden was the pain and collapse from a mesenteric hæmorrhage in a subject of chronic Bright's; the personal and family history, urinalysis, the location of the tenderness, the rapidly-forming tumor and the signs of bleeding explained the otherwise obscure condition. Less acute but more puzzling was a case of slowly-progressing hæmorrhage from a ruptured right kidney. A man was taken with sudden pain while romping with his children; two weeks later he presented a large, tender tumor from the loin almost to the groin and a septic temperature. The original location of the pain, the development of the tumor, the collapsic relapses, a general anæmia and blood in the urine led to a retro-peritoneal incision and nephrectomy.

When an extra-appendiceal infection has been successfully encysted there are a number of conditions which it may simulate, from its location or from the direction taken by the pus. In such cases, however, the element of urgency has been largely eliminated, and the lesions in both instances must be treated on the same general principles. Among those I have met with which gave rise to doubt are psoas and lumbar abscesses, both of which are not infrequently produced by the retroperitoneal phlegmons of appendicitis. The points of resemblance, also, were quite marked between a subphrenic abscess of appendiceal origin and one of the right suprarenal capsule; between an abscess containing an appendix which was adherent to the liver and a leaking empyema of the gall-bladder encysted by adhesions. In one patient a long distended pus-tube formed a tender mass directly below the caput coli; in another an acutely-inflamed appendix hung down on a tumor in the same location, which proved to be an immobile, ectopic right kidney. Exploration was necessary to clear up a chronic appendicitis associated with and possibly inducing carcinoma of the cæcum,* while urinalysis settled the question between malignant disease, appendiceal abscess and pyonephrosis in a floating, calculous kidney lying close to the cæcum.

Still more difficult sometimes is the distinction between an inflammation originating in a pendent appendix and in the uterine adnexa. In a general way, when we can satisfy ourselves that the peritoneal involvement arises from the latter, the urgency for operative interference is modified, and it may

* *North American Journal of Homœopathy*, Apr.1, 1897.

be safer occasionally to wait for a subsidence. Our main reliance for a diagnosis must be on intelligent vaginal and rectal palpation and the characteristic finger-tip tenderness at the base of the appendix. I have met with a number of cases in which it was hard to distinguish the matted mass about a right pus-tube from the encysted abscess caused by an appendix hanging down into the pelvis. In one case such an abscess was walled in by the right broad ligament behind a large uterine fibroid; in another it occupied a corresponding position on the left side of the pelvis; in several, tubal disease and relapsing appendicitis have coexisted side by side. In two patients a more acute condition was induced by twisted, gangrenous, small ovarian cysts which formed tender tumors in the right iliac fossa with symptoms of peritonitis; their mobility and origin were recognized by bimanual palpation. A rectal examination is also important in the male, for an inflamed appendix in the pelvis may produce, probably by contact, cystic and rectal symptoms which overshadow everything else. I have even found pain and tenderness on the left side with retraction of the testicle. Such symptoms are especially met with in those progressive, multiplying abscesses in their downward course over the bladder and across the pelvis to the left side. Again, when the appendix points upward and inward, the pain may be referred to the epigastrium or left hypochondrium. In one case tenderness and tumefaction just above the umbilicus had long been watched as a gastric ulcer; operation showed a so-called N. E. appendix with a protected distal perforation. In two instances, multiple abscesses, following the upward course, inside the ascending and under the transverse colon, misled the attendants until too late.

Of the more common allied seizures, those which most frequently give rise to doubt are acute indigestion, gall-stone and renal colic. The first produces gastric, or diffuse, and particularly left-sided soreness, which can only mislead in the pelvic position of the appendix just referred to. Next to this, appendicitis is the more common affection.

Hepatic colic is associated with epigastric cramps, frequent and repeated vomiting, with pain and tenderness in the region of the gall-bladder, the former radiating towards the shoulder or scapula, and occasionally with jaundice. I have operated

one case of acute appendicitis with a coincident suppurative cholecystitis; another in which beforehand we had recognized a relapsing appendicitis, together with a distended gall-bladder. In *renal colic* there is the characteristic vesical and sometimes rectal tenesmus and retraction of the testicle, all of which, however, may be produced by disease of a pendent appendix. The coincident gastro-intestinal symptoms may even suggest bowel obstruction. When a calculus becomes lodged in the right ureter near the cæcum, the diagnosis is still more difficult. I know of one case in which an expert removed a presumably inflamed appendix, but the attack did not subside until the next day, when the patient passed a small stone! Urinalysis is after all our main stay, although the general complexus should usually decide the careful observer. In one interval operation an incision was made which would enable me to attack the appendix and at the same time palpate the kidney; oxaluria, slight hæmaturia, pyuria and loin tenderness had caused a suspicion of coincident trouble in the pelvis of the right kidney. When the innocent-looking appendix, pointing upward and outward, emptied itself after removal of nearly a teaspoonful of pus, I was satisfied to let the kidney alone and the result bore out the decision. In another patient the symptoms produced by repeated twists of a floating kidney had led to the diagnosis of relapsing appendicitis. The shape and mobility of the tumor, together with a careful inquiry into the character of the attacks, set us right.

In subacute or insidious, lingering cases, particularly those due to parietal or endo-appendiceal pus-formations and consequent slow systemic infection, the question of differentiation from typhoid fever not infrequently arises, and I am particularly pleased to know that Dr. Goodno will open the discussion of this paper because of his very extended experience with this disease. In both there is ileo-cæcal tenderness and seething, the general digestive disturbance, more or less abdominal distention and pain, and occasionally even the well-known prodromata. The splenic enlargement and the spots are sometimes of questionable value. The cardinal symptoms are, after all, those to be relied upon for the recognition of appendicitis, and as these must necessarily be of mild degree, if they do not intensify, there is time to watch the temperature, tongue,

abdomen, stools and mentality. It is more particularly the later complications—hemorrhage and perforation—that are apt to puzzle us, especially in the absence of a previous history, as in a walking typhoid. Such a case, an ignorant Polish girl, was brought to the Hahnemann Hospital with the sudden and urgent symptoms of a perforative peritonitis and exquisite tenderness at the McBurney point. Neither history nor subjective symptoms could be obtained, but operation was imperative and showed numerous and perforative lesions in the lower ileum. An extensive resection was necessary.

In dealing with chronic appendicitis hernia must again be borne in mind. I recall two cases of tender right inguinal hernia, giving a history of recurring attacks of acute pain and vomiting, which had suggested obstruction. They both proved to be cæcoceles with diseased appendices. On several other occasions I have incidentally removed a damaged appendix while operating for hernia. Another very common and kindred condition is the incipient hernia of those who are relaxing and *pot-bellied*, so to speak. Not long since an active business man had become incapacitated for work by right iliac pain, dragging and tenderness, and general digestive disturbance. He had been the rounds, surgeons advising excision of the appendix, physicians variously naming his condition—entero-colitis, neurasthenia, etc. When examined in a standing posture, a beginning, right-oblique inguinal hernia was readily recognized and a truss corroborated the diagnosis in a most satisfactory manner. I have met with several similar cases. Aside from these conditions there is possibly but an occasional coxitis to exclude, unless we accept the term lumbo-abdominal neuralgia, the equally doubtful gouty appendicitis, or what Dr. Bartlett has aptly termed the appendiceal hysteria of surgeons!

Relying mainly on the pathognomic three-legged stool, the discriminating practitioner will eliminate the above sources of error and arrive at a diagnosis; the diagnosis reached, what is the safest and most satisfactory treatment?

In the chronic form there is no doubt that a persistently tender appendix is a damaged one, and this means an infected one; if infected, it will sooner or later produce abscess or peritonitis. The risks of interval excisions cannot compare for one moment with those of peritonitis and septicæmia, the ven-

tral hernia of a drained belly, or the possibilities of intra-abdominal adhesions. Again, a severe attack or even a distinct one gives promise that infinitely outweighs the possible dangers of an operation during quiescence, while the chances of an obliterating inflammation are too chimeric to rely upon. The conclusion is self-evident, to remove the appendix in every such case; preventive medicine is the ideal, preventive surgery is its corollary.

In this connection I have taken pains to inform myself of the conclusions arrived at by the business men who deal financially with our chances of living—the life-insurance people. After inquiring into the instructions given to their examiners by a number of these companies, I quote from one which is probably the most comprehensive and at the same time the most conservative. After primary attacks without peri-appendiceal suppuration, where the appendix was not removed, more than 90 per cent. are found to recur within two years, and the advice is given to accept the 10 per cent. “risk” after this time. In those of chronic relapsing appendicitis, at least three years must elapse after an attack, with the decision by the examiner that the appendix has become obliterated (?). In cases of irregularly recurring appendicitis, the question is raised whether they should be accepted at all, and five years of immunity are required before they become insurable. With applicants, by contrast, who have been operated, one year and by some six months are allowed for the development of hernia when a clean excision has been made, while the time-penalty and the rigidity of the examination are increased according to the incompleteness of the operation and the co-existing complications.

In the acute and sub-acute varieties definite rules governing operative interference are still wanting, and it seems to me that there is no place more appropriate than a meeting of this National Society for the ventilation and discussion of such a question. Those of us who have done pioneer work in appendicitis, in hernia or bowel obstruction, and in brain surgery will immediately recognize a similarity of issues. It after all resolves itself into the question of what are the surgical and what are the medical cases. Not long since the general practitioner did not call on the surgeon in obstructions until stercoraceous vomiting was well established, even sometimes to bucketsful,

until he had tried all manner of injections, purgation possibly, persistent and perhaps violent taxis, and even succussion, on the principle of well shaken when taken. To-day the up-to-date physician gives us a chance as soon as his diagnosis is made, and the sooner this conclusion is reached the better are the results. So too in head injuries, popular medical opinion was wont to say that so-called *concussion* must be treated medically or expectantly, and when the death-preceding phenomena of *compression* set in, the surgeon, or perhaps better, the undertaker, was allowed to take a hand. But now preventive and curative surgery is given an early chance and every intelligent practitioner recognizes that by "concussion" we mean a disturbance of the cerebral equilibrium due to contusion or laceration, the slightest persistence or intensification of which calls for a life, mind, or function-saving surgical intervention. The same is true of appendicitis; experienced physicians recognize in the diagnosis of the disease a surgical condition and at once place the responsibility where it belongs, until it would appear to be a question of when we should *not* operate. This tendency, as well as an increased experience, have led me to conclude that almost the only object in postponing operation is to perform the safer and more satisfactory one between attacks.

Immediate operation in every case of appendicitis, however, will not be accepted by the laity, and more particularly by the rank and file of practitioners, as long as statistics show that the majority of attacks are recovered from, to say nothing of the instinctive prejudice against the knife. On the other hand, an analysis of my first 103 operations* shows that the vast majority were operated too late, that is to say after complications had developed which would have proved fatal but for good luck or nature. Thus, of 78 cases operated during attacks, 47 encysted abscesses and 24 diffuse, peritoneal suppurations belonged to this class, while one fulminating case was of the variety which can never be taken in time. The remaining six were operated before serious peri-appendiceal lesions had developed, and they all recovered; the 25 interval operations gave an equally clean score. An examination of the

* HAHNEMANNIAN MONTHLY, January, 1895.

table of 119 subsequent operations appended to this paper will enable us to arrive at the same conclusion. Thus, of 82 cases operated during attacks, there was extra-appendiceal suppuration in 54. This pus was *luckily* limited to encysted abscesses in 31, while in 23 it was free and more or less generally diffused. They were, therefore, all operated too late. The remaining 28 were taken, it is true, before the development of such extra-appendiceal suppuration. But in four instances the infection had spread to the neighboring cæcum and to the lymphatic and vascular channels, causing systemic poisoning. In at least fifteen more, peritoneal sepsis was delayed or prevented by the kindly intervention of fibrinous exudates, adhering intestinal coils, or an enveloping omentum. Furthermore, if we compare the time of operation with that in the diffuse peritonitis cases, an inexplicable *chance* alone can account for the benign character of the remainder. The same is largely true of the 37 interval operations, for a study of the pathologic conditions found and the clinical history of preceding attacks show the same protection or good luck. Thus, at least 20 had had a severe attack, while 25 showed the adhesions from a protective fibrinous peritonitis. This class also speaks volumes for the safety, uncomplicated recoveries and ultimate results of appendectomy between attacks.

While we are able to differentiate on the dissecting-table or with the microscope, the various forms of appendicitis, and the peri-appendicular processes which are the fatal ones, we cannot always recognize them and particularly their inception by the clinical signs. The question of operation must depend, therefore, almost entirely upon the intensity and persistence of the symptoms. In a disease that may gallop so rapidly to a fatal issue, this calls for frequent examinations at short intervals and a careful comparison of the results of each. Such questions must be settled largely by the individual experience of the attendant, and as this is influenced to a great extent by the run of cases each practitioner has met with, consultation, with the consequent benefit of a multiplicity of experience, is most desirable. For instance, some men will treat so-called benign cases until lulled into a false sense of security with their first malignant one. I know of more than one rude awakening! Others will see so many operative attacks as to demand the

knife in every instance, and, incidentally, it may be said that they are pretty safe guides to health. Still others will have one malignant case after another unsuccessfully operated, until they arrive at the conclusion that nature should be left to take its course. Early recognition, early counsel and a few early operations are the *indicated remedy*.

My working plan regarding operation is about as follows: In a severe attack characterized by a sudden onset, and particularly by intense cardinal symptoms, with or without corresponding concomitants, operation should be undertaken at once.

In a milder seizure, the more common form, recovery may be looked for with the hope of an interval operation. In deciding the question of persistence in such cases I have come to rely more than ever on the twenty-four-hour limit, and I believe that whenever doubt or would-be conservatism has induced me to delay, I have had cause to regret the inaction. Appendicular colic or retention appendicitis and the non-infective or benign form give unmistakable and progressive signs of subsidence in much less time. Cases first seen at or after the end of this period, and in which the distinct symptoms of an attack are found, are better operated. Even after amelioration has begun and in subacute, lingering cases, all the symptoms must be frequently noted and compared to see that such subsidence is progressive. An aggravation or even a stand-still call for operation. The cardinal symptoms are again the deciding ones; an accession of pain, the flinching and the expression that says pressure really *hurts*, and the involuntary stiffening of the abdominal muscles are danger-signals that must never be neglected. To a less degree the concomitant symptoms will aid us. While bowel movements, free passage of gas and abundant gurgles usually accompany subsidence, a slackened peristalsis should immediately arouse suspicion. By watching the epigastric valley an on-coming bloating is often recognized, and so is the approach or recurrence of vomiting in its precursor—belching. The observing eye, too, will see in the “sick look” the forerunner of the Hippocratic face of an established peritonitis. A rising or stationary temperature and a quickening pulse, especially when combined with a fall in the former, are ominous signs.

The indications for operation and the time for interfering in

extra-appendicular infections: localized or diffuse suppurative peritonitis, peritoneal sepsis, cellular phlegmons, etc., are strictly surgical technicalities and, therefore, beyond the sphere of this paper.

ANALYSIS OF 119 CASES OF APPENDICITIS, OPERATED FROM
JANUARY 1, 1895, UNTIL JULY 1, 1897.

In the following table the cases have been classified as operated during attacks (82): Class I., without extra-appendiceal suppuration, Class II., with localized, or Class III., with diffuse purulent peritonitis; and Class IV. as interval operations (37). I have excluded all cases presenting a dual condition—twenty-four appendectomies in which coincident lesions equalled or overshadowed the appendiceal disease, although both were diagnosed. Many of these have been referred to in considering the differential diagnosis. I have also excluded those in which a damaged appendix was *incidentally* removed when operating for something else, as well as five abscesses in which, while there was reason to suspect the appendix as the cause, this was not positively demonstrated. Including these, the operations would aggregate 158. Adding to this number 103 operations reported in January, 1895,* my operative experience with the appendix amounts to 261 cases.

Under *Symptoms* will be found those at the time of operation, unless otherwise specified. In several instances the case was seen late by the physician mentioned; in a few I was responsible for the delay. The hospital cases were operated, as a rule, as soon as possible after admission.

By *Pathology* is meant the macroscopic conditions found. In some the results of microscopic examinations conducted by Dr. P. Sharples Hall are added; a number of specimens have been sacrificed to the whim of the patient; others have been kept intact for Dr. R. B. Weaver who has prepared them for the museum of Hahnemann College; a few are in the hands of an artist. In Cases 8 and 21 of Class I., and in Case 24 of Class IV., the Hospital records, unfortunately, do not give the pathologic data.

Under *Treatment*, the direction of the incision is given, which

* *Loc. cit.*

will be understood by every surgeon, its extent necessarily varying according to circumstances. Except in interval cases, my rule is to allow plenty of working-room. The secondary suture has usually been done at the end of a week, early disturbance of the protective and draining-pack having been the cause of at least one fatality I know of. The terms *extra* and *transperitoneal* refer to the route of evacuation, not to the location of the abscess. In the latter the free peritoneal cavity is opened, protected by gauze pads, and the pus let out across it, so to speak; in the former it is not entered. Where a non-localized suppurative peritonitis was present, a "toilet" was made, which consists of a more or less complete evisceration and cleaning of the intestinal coils with sublimate mops, that is to say, the intestines are drawn out until glistening visceral peritoneum is seen. If the purulent peritonitis is not known to be universal a douche may disseminate the infection; when pus, however, was found everywhere, the intestines were turned out and sterile salt solution, or, at a pinch, weak formalin solution poured in until it ran clear. The abdominal cavity was then partly dried, the coils cleaned and replaced with strips of iodoform gauze as drains. Recently I have injected an ounce of a saturated solution of the sulphate of magnesia into the small intestine, as high up as possible, by means of an anti-toxin syringe, closing the puncture with a Lembert stitch (McCosh). This is supplemented by a purge administered by the mouth, or through the stomach-tube if vomiting has necessitated the use of the latter.

In giving the *Results*, primary union was only obtained when no drainage was used; if a gauze or glass drain was necessary, the healing of this portion of the wound is stated as "by granulation." All wound complications are mentioned. When through subsequent examination, after the lapse of a year or more, there has been reasonable proof that no ventral hernia will appear, the fact is so stated. If a hernia has been found or *is said* to exist, it is also mentioned. Private patients, as a rule, have worn a truss or supporter for from six months to a year after operation; with hospital cases this has been exceptional. The room-confinement of sutured patients without wound complications has been about two weeks, the minimum nine days.

CLASS I.—Operations During Attacks ; No Extra-Appendiceal Suppuration.

	Symptoms.	Pathology.	Operation.	Result.
1. Male, 58 years. Dr. Norton.	Acute attack, 4th day. Usual symptoms, small tumor; several previous attacks.	Appendix perforated, containing concretion, and tightly wrapped in omentum.	Vertical incision; appendectomy; pack; secondary suture.	Recovery; primary union; no hernia.
2. Male, 36 years. Dr. Chase.	Acute attack, 3d day. Usual symptoms; small tumor; one previous attack.	Localized gangrene and perforation; appendix tightly wrapped in omentum; retained coprolith.	Oblique incision; appendectomy; pack; partial secondary suture; gauze drain.	Recovery; union partly primary, partly by granulation; subsequent discharge of silk ligature from stump of appendix; no hernia.
3. Male, 41 years. Dr. Chase.	Acute attack, 3d day. Cardinal symptoms; distention, small tumor, constipation, fever, rapid pulse.	Appendix gangrenous; protected by old omental and intestinal adhesions.	Oblique incision; appendectomy; pack; secondary suture.	Recovery; primary union; no hernia.
4. Female, 44 years. Dr. D. R. Streets.	Acute attack, 4th day; induced by strain. No symptoms, but pain and exquisite tenderness extending toward loin.	Appendix completely gangrenous, imbedded in soft plastic lymph (no adhesions); on outer side of colon, pointing upward.	High oblique incision; appendectomy; pack; secondary suture.	Recovery; slow union due to localized wound sepsis; no hernia.
5. Male, 17 years. Hahnemann Hospital.	Relapsing form for one year; subacute attack, 3d day; intensifying symptoms; small tumor.	Pendent appendix; suppurative parietal appendicitis; old adhesions.	Low oblique incision; appendectomy; suture.	Recovery; primary union.
6. Male, 60 years. Hahnemann Hospital.	Relapsing form; subacute attack, 4th day; operation on account of persistence of usual symptoms; small tumor.	Suppurative endo- and parietal appendicitis; old and recent fibrinous peritonitis.	Vertical incision; appendectomy; pack; secondary suture.	Recovery; primary union; small ventral hernia.
7. Male, 45 years. Dr. Chase.	Acute attack, 2d day; usual symptoms; one previous severe attack.	Enormous appendix; acute, suppurative and ancient exudative endo- and parietal appendicitis; beginning fibrinous peritonitis.	Oblique incision; appendectomy; pack; partial secondary suture.	Recovery; fecal fistula from sloughing of stump; very slow closure after failure of freshening and suture; no hernia.
8. Male, 21 years. Hahnemann Hospital.	Relapsing form for 5 months; acute attack, 2d day; typical and severe symptoms.	Record of local conditions wanting.	Oblique incision; appendectomy; suture.	Recovery; primary union.
9. Male, 28 years. Dr. Chase.	Relapsing form; several previous attacks; persistent ill-health; this attack beginning three hours before time set for operation; usual initial symptoms.	Appendix erect, curling forward; intensely congested and swollen; chronic exudative, endo- and parietal appendicitis; distal cyst and rather soft retained fecal lump.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union.

	Symptoms.	Pathology.	Operation.	Result.
10. Female, 20 years, Hahnemann Hospital.	Acute attack, 4th day; cardinal symptoms severe; distention, obstipation, vomiting; right iliac tumefaction; menstruating.	Exudative and suppurative parietal appendicitis; extensive recent fibrinous peritonitis throughout right iliac fossa.	Oblique incision; appendectomy; pack; secondary suture.	Recovery; primary union.
11. Male, 32 years, Dr. S. C. Webster.	Subacute attack, 8th day; acute supervening attack, 1st day; usual symptoms.	Numerous soft adhesions binding appendix to inner side of cæcum.	Oblique incision; appendectomy; pack; secondary suture.	Recovery; primary union.
12. Male, 41 years, Hahnemann Hospital.	Acute attack, 2d day; usual symptoms; operation on account of persistence.	Endo- and parietal exudative appendicitis.	Oblique incision; appendectomy; suture.	Recovery; primary union.
13. Female, 53 years, Dr. Black.	Acute attack, 3d day; cardinal symptoms, constipation, distention, high temperature and pulse.	Exudative and suppurative parietal appendicitis extending to cæcum; beginning fibrinous peritonitis.	Oblique incision; appendectomy; pack; secondary suture.	Recovery, slow from erratic temperature; primary union.
14. Male, 25 years, Dr. C. D. Smedley.	Diarrhea and typhoid symptoms followed by characteristic symptoms of appendicitis; second day of latter.	Appendix gangrenous in spots, buried in subcæcal fossa by soft adhesions.	Oblique incision; appendectomy; pack; secondary suture.	Recovery; slow union from stitch infection.
15. Male, 26 years, Hahnemann Hospital.	Acute attack suddenly developing on subsidence of subacute attack, 2d day; typical symptoms.	Exudative and suppurative, endo- and parietal appendicitis; beginning fibrinous peritonitis.	Oblique incision; appendectomy; pack; secondary suture.	Recovery; primary union.
16. Female, 19 years, Dr. Krusen.	Operated during subsidence of a very severe attack, during which prostration precluded surgical interference; tenderness in loin marked.	Perforation at tip of strictured, cystic appendix, sealed by peritoneal adhesions close to right kidney.	High oblique incision; appendectomy with great difficulty; pack; secondary suture.	Recovery; almost fatal collapse after operation; slow union from wound infection.
17. Female, 31 years, Dr. C. D. Smedley.	Subacute attack, 7th day; lingering symptoms; several previous attacks.	Suppurative, endo- and parietal appendicitis; flexion retaining pus; peritoneal coat involved in spots.	Vertical incision; appendectomy; suture.	Recovery; primary union.
18. Female, 26 years, Hahnemann Hospital.	Acute attack, 3d day; cardinal and marked pelvic symptoms.	Exudative, endo- and parietal appendicitis; appendix bound to ovary by soft adhesions.	Oblique incision; appendectomy; pack; secondary suture.	Recovery; primary union.
19. Male, 25 years, Hahnemann Hospital.	Subacute attack, 4th day; usual symptoms intensifying; small tumor.	Exudative and suppurative, endo- and parietal appendicitis; flexion and stricture; old adhesions.	Intermuscular incision; appendectomy; pack; secondary suture.	Recovery; primary union.
20. Male, 35 years, Hahnemann Hospital.	Acute attack, 2d day; usual symptoms; operation on account of persistence.	Acute and chronic, endo- and parietal, exudative and suppurative appendicitis; appendix bent, cystic at end.	Oblique incision; appendectomy; suture.	Recovery; primary union.

	Symptoms.	Pathology.	Operation.	Result.
21. Male, 28 years. Hahnemann Hospital.	Acute attack, 3d day; cardinal symptoms marked; constipation, distention.	Record of local conditions wanting.	Oblique incision; appendectomy; pack; secondary suture.	Recovery; primary union.
22. Female, 24 years. Hahnemann Hospital.	Acute attack, 2d day; usual symptoms intensifying; menstruating.	Endo- and parietal exudative appendicitis, beginning fibrinous peritonitis; appendix bent, strictured, and cystic at end.	Oblique incision; appendectomy; pack; secondary suture.	Recovery; primary union.
23. Female, 31 years. Dr. C. D. Smedley.	Acute attack, end of 1st day; cardinal symptoms; high temperature and pulse; constipation and distention; probably previous attacks.	Phlegmonous inflammation extending over entire cæcum and lower end of ileum; multiple minute parietal abscesses in appendix; septic thrombi in vessels of meso-appendix.	Oblique incision; appendectomy; pack; secondary suture.	Recovery, delayed by persistent zig-zag temperature; primary union.
24. Male, 9 years. Dr. J. P. Lukens.	Acute first attack, 2d day; cardinal symptoms; very high temperature; rapid pulse, delirium; vomiting; constipation.	Phlegmonous parietal appendicitis involving almost entire cæcum; exudative inflammation of serous coat.	Vertical incision; appendectomy; pack; secondary suture.	Recovery, complicated by high septic temperature and later by double pneumonia; primary union.
25. Female, 17 years. Dr. Marsden.	Acute attack, 4th day; cardinal symptoms; persistent high temperature and pulse; probably previous attacks; menses overdue.	Appendix bent with distended end; inflammatory appearances extending over entire caput coli; diffuse suppurative endo- and parietal appendicitis with retained pus and multiple mural abscesses; septic thrombosis of vessels of meso-appendix.	Oblique incision; appendectomy; pack.	Death from acute septicæmia.
26. Female, 9 years. Dr. O. H. Paxson.	Acute attack, 4th day; apparent indigestion, relief, aggravation; sought advice 3d day; cardinal and other symptoms marked.	Appendix swollen, S-shape, pendent, intensely congested; suppurative endo-appendicitis.	Oblique incision; appendectomy; suture.	Recovery; stitch infection; healing of extra-peritoneal portion of wound by granulation.
27. Male, 8 years. Dr. Grimshaw.	Acute attack, 4th day; cardinal symptoms and moderate temperature; constipation; small tumor.	Appendix gangrenous and perforated at distal third; tightly wrapped in omentum.	Oblique incision; appendectomy; pack; secondary suture.	Recovery; primary union.
28. Female, 25 years. Dr. O. S. Haines.	Acute attack, 24 hours; several similar previous ones; cardinal symptoms; rising temperature and pulse; some distention; constipation; belching.	Pendent S-shaped appendix; intensely congested; cystic end; considerable free serum in abdomen.	Vertical incision; appendectomy; stump buried; suture.	Recovery; primary union.

CLASS II.—Operations During Attacks; Localized Suppurative Peritonitis (*Encysted Abscess*).

	Symptoms.	Pathology.	Operation.	Result.
1. Female, 8 years. Dr. Closson.	Subacute attack, 10th day; sepsis; large suprapubic and iliac tumor; marked rectal and vesical irritation.	Enormous abscess extending from cæcum down and filling pelvis; free concretion; perforated appendix seen, but not removed.	Oblique incision to symphysis; transperitoneal evacuation; pack; partial secondary suture; gauze drain.	Recovery; union partly primary and partly by granulation; no hernia.
2. Male, 72 years. Dr. Ingersoll.	Subacute attack, 9th day; suppurated strain; slowly forming tumor above groin; gradual sepsis.	Abscess at edge of pelvis; firm adhesions; appendix not removed.	Parker's incision; transperitoneal evacuation; pack.	Healing by granulation; remote death from pneumonia.
3. Male, 49 years. Dr. Reeves.	Acute attack, 5th day; usual symptoms; small tumor about cæcum.	Tip of appendix buried in subcecal fossa, perforated and surrounded by a small abscess communicating with a large retrocecal phlegmon running up and down the back.	Oblique incision; appendectomy; pack; later, counter-opening in loin.	Slow recovery; healing by granulation; no sinus; no hernia.
4. Male, 13 years. Dr. Chase.	Acute attack, 2d day; severe usual symptoms; small tender tumor at McBurney point; relapsing variety.	Firmly encysted abscess; perforated appendix, containing a concretion.	Oblique incision; transperitoneal evacuation; appendectomy; pack; secondary suture.	Recovery; primary union.
5. Male, 22 years. Dr. W. H. Gardiner.	Acute attack, 7th day; diffuse tumor from loin to groin; profound sepsis; distention, etc.	Well encysted abscess about cæcum and enormous retroperitoneal phlegmon; appendix not removed.	Vertical incision; transperitoneal evacuation of first; pack; counter-opening in loin for phlegmon; secondary suture of anterior wound.	Recovery; primary union of sutured wound; no sinus; no hernia.
6. Male, 20 years. Dr. J. D. Lawrence.	Acute attack, 4th day; relapsing variety; marked cardinal symptoms; distention, constipation, fever; tumor under McBurney point.	Firmly encysted abscess about cæcum; appendix not removed.	Oblique incision; extraperitoneal evacuation; drain; secondary suture.	Recovery; primary union.
7. Male, 22 years. Hahnemann Hospital.	Subacute attack, 10th day; cardinal symptoms; diarrhoea; normal temperature and pulse; tender tumor about cæcum.	Suppurative parietal appendicitis; small firmly encysted abscess.	Oblique incision; transperitoneal evacuation; appendectomy; pack; secondary suture.	Recovery; primary union.
8. Male, 9 years. Dr. Munson.	Acute attack, 8th day; intense sepsis; tumor low down.	Large abscess, containing concretion; second abscess in pelvis; appendix perforated near tip and gangrenous.	Parker's incision; transperitoneal evacuation of first abscess; a few days later, appendectomy and evacuation of pelvic abscess; pack.	Tedious recovery; fecal leak; then persistent sinus; healing by granulation.

	Symptoms.	Pathology.	Operation.	Result.
9. Male, 25 years. Dr. Frantz.	Subacute attack, 8th day; sepsis; tumor from loin to groin; operated for similar abscess five years previously.	Enormous abscess containing gas and feces; appendix sloughed; leak in cæcum.	Vertical incision; transperitoneal evacuation; counter-opening in loin; pack; drain.	Recovery; healing by granulation; no sinus.
10. Male, 16 years. Hahnemann Hospital.	Acute attack, 2d week; usual history; sepsis; tumors above groin and outside of colon.	Gangrenous, perforated appendix in upper abscess; lower one about its base and caput coli; both well encysted.	Oblique incision; transperitoneal evacuation; appendectomy; pack; secondary suture.	Recovery; primary union.
11. Male, 29 years. Dr. Gieser.	Acute attack, 5th day; tumors in groin and toward loin; usual history; pus symptoms.	Cæcum below kidney; pendent, infected appendix in upper abscess; separate abscess below.	Long oblique incision; transperitoneal evacuation; appendectomy; pack.	Recovery; healing by granulation.
12. Male, 30 years. Dr. Posey	Subacute, subsiding, then intensifying attack, 14th day; diffuse tumor in loin; marked sepsis.	Enormous diffuse characteristic abscess extending from cæcum to loin; intra and retroperitoneal; appendix not removed.	High oblique incision; extraperitoneal evacuation; drain.	Recovery; healing by granulation; sinus persists.
13. Male, 13 years. Dr. Atkinson.	Acute attack, 7th day; usual symptoms; fever; distention; tumor outside and above cæcum.	Firmly encysted abscess; appendix not removed.	Vertical incision; transperitoneal evacuation; pack; partial secondary suture.	Recovery; good union; no sinus.
14. Male, 40 years. Hahnemann Hospital.	Acute attack, 3d day; cardinal symptoms; distention; constipation; fever; tumor below cæcum.	Suppurative parietal appendicitis, gangrenous in spots; well encysted abscess at brim of pelvis.	Oblique incision; transperitoneal evacuation; pack; secondary appendectomy and partial suture.	Recovery; union partly primary, partly by granulation; ventral hernia.
15. Female, 67 years. Dr. Strong.	Acute attack, 8th day; usual history; symptoms of sepsis; tumor above Poupart's ligament.	Large abscess; firm adhesions; appendix not removed.	Parker's incision; extraperitoneal evacuation; drainage.	Recovery; healing by granulation; no sinus; no hernia.
16. Male, 30 years. Dr. Closon.	Acute attack, 3d day; cardinal symptoms marked; high temperature and pulse; distention; constipation; tumor against ilium.	Enormous abscess; soft adhesions; appendix not removed.	Oblique incision; transperitoneal evacuation; pack; secondary suture.	Recovery; primary union; appendix subsequently removed for recurring attack.
17. Male, 27 years. Hahnemann Hospital.	Acute attack, 2d week; usual history; tumor about cæcum, fever, etc.; frequent previous attacks.	Firmly encysted abscess outside cæcum; appendix not removed.	Oblique incision; transperitoneal evacuation; pack; secondary suture.	Recovery; primary union.
18. Adult male. Dr. McKinstry.	Acute attack, 4th day; tumor above groin; sepsis; usual history.	Well encysted abscess against ilium; characteristic pus; appendix not removed.	Parker's incision; extraperitoneal evacuation; drain.	Recovery; healing by granulation; no sinus.

	Symptoms.	Pathology.	Operation.	Result.
19. Male, 21 years. Hahnemann Hospital.	Acute attack, 4th day; usual symptoms and history; tumor above groin; fever, etc.	Poorly encysted, characteristic abscess on pelvic brim, containing concretion; appendix not removed.	Parker's incision; transperitoneal evacuation; pack.	Recovery; healing by granulation; no sinus.
20. Female, 17 years. Dr. Kennedy.	Subacute attack, 9th day; usual course and symptoms; intense sepsis and prostration; diffuse tumor from groin to loin.	Gangrenous appendix perforated near tip; enormous intra- and retroperitoneal abscess.	Oblique incision; extraperitoneal evacuation; appendectomy; counter-opening in loin.	Death from acute septicæmia.
21. Female, 35 years. Hahnemann Hospital.	Relapsing form; abscess about cæcum and toward loin; septic symptoms; previously operated for a similar abscess.	Appendix sloughed; leak in cæcum; abscess containing gas and feces.	Oblique incision; extraperitoneal evacuation; drain; subsequent intestinal suture; counter-opening in loin.	Recovery; fecal leak healed; sinus persists.
22. Female, 9 years. Dr. Frantz.	Acute attack, 7th day; septic symptoms; usual history; tumor about cæcum.	Small abscess; suppurative endo- and parietal appendicitis.	Oblique incision; transperitoneal evacuation; appendectomy; pack.	Recovery; healing by granulation; no sinus.
23. Female, 30 years. Hahnemann Hospital.	Subacute attack, 8th day; usual symptoms; fever; tender tumor behind uterus.	Well encysted abscess in pelvis; characteristic pus; partly sloughed appendix seen, but not removed.	Median incision; transperitoneal evacuation; pack; partial secondary suture; gauze drain.	Recovery; union partly primary partly by granulation; no sinus.
24. Female, 38 years. Dr. Still.	Acute attack, 6th day; pelvic symptoms prominent; soft tender tumor behind fibroid; intense sepsis; marked prostration; end of menstruation.	Large softly encysted abscess in right side of pelvis; gangrenous appendix.	Median incision; transperitoneal evacuation; appendectomy; pack; partial secondary suture.	Recovery; slow, but complete healing of sinus.
25. Male, 37 years. Dr. Earhart.	Acute attack, 10th day; tumor above groin and filling pelvis; intense rectal tenesmus; some bladder irritation; high fever, distention, constipation, etc.	Enormous abscess from cæcum down to and filling pelvis; firmly encysted; appendix not removed.	Oblique incision to symphysis; transperitoneal evacuation; pack.	Recovery; healing by granulation; sinus persists.
26. Male, 20 years. Dr. Campbell.	Subacute attack, 3d week; insidious course; tumor outside and above cæcum; fever; profound prostration.	Small abscess with extensive soft fibrous adhesions; appendix not removed; probably tubercular.	High oblique incision; transperitoneal evacuation; pack.	Recovery; healing by granulation; no sinus.
27. Male, 56 years. Hahnemann Hospital.	Subacute attack, 4th week; usual symptoms; badly septic; tumor from cæcum toward loin.	Large well-encysted abscess to outer side of colon; suppurative parietal appendicitis; firm adhesions.	Oblique incision; extraperitoneal evacuation; appendectomy; drain.	Recovery; healing by granulation; no sinus.
28. Male, 35 years. Dr. Norton.	Subacute attack, 10th day; septic symptoms; tumor against ilium.	Characteristic pus; appendix not removed; very firm adhesions.	Oblique incision; transperitoneal evacuation; pack.	Recovery; healing by granulation; no sinus.

	Symptoms.	Pathology.	Operation.	Result.
29. Male, 21 years. Dr. Perkins.	Subacute attack, 14 days; two attacks 1 year and 4 months previously; profoundly septic and in desperate condition; large tumor above groin.	Small multiple abscesses with extensive soft fibrinous adhesions; appendix not removed.	Parker's incision; transperitoneal evacuation; pack.	Recovery; healing by granulation; no sinus.
30. Male, 15 years. Dr. Earhart.	Acute attack; apparent recovery and relapse; 3d day of latter; cardinal symptoms; distention; fever; tumor in groin.	Encysted abscess, with rather soft adhesions and extending into pelvis; end of appendix sloughed, balance gangrenous.	Parker's incision; transperitoneal evacuation; appendectomy and secondary suture a week later.	Recovery; slow union from wound infection; no sinus.
31. Male, 22 years. Dr. R. R. Paxson.	Subacute attack, patient about, 4th day; usual symptoms; small tumor close to ilium.	Appendix gangrenous; lying in encysted abscess in lateral gutter.	Oblique incision; appendectomy; pack; secondary suture.	Recovery; primary union.

CLASS III.—*Operations During Attacks; Non-Limited Suppurative Peritonitis.*

	Symptoms.	Pathology.	Operation.	Result.
1. Male, 24 years. Dr. Closson.	Acute first attack, 40 hours; subsidence of pain; tenderness low; rigidity; distention, etc.	Appendix gangrenous, perforated, partly protected by adhesions, hanging down on pelvic brim; large amount of free pus in abdomen.	Oblique incision supplemented by one at right angles to it; appendectomy; toilet; pack; secondary suture.	Recovery; primary union; no hernia. Reported in <i>North American Journal of Homoeopathy</i> , April, 1897.
2. Male, 8 years. Hahnemann Hospital.	Acute attack, 2d day; intense cardinal symptoms; distention; obstipation; vomiting; rising temperature and pulse.	Appendix unprotected, gangrenous in spots; free pus in abdomen.	Long oblique incision; appendectomy; toilet; pack; secondary suture.	Recovery; primary union.
3. Male, 19 years. Dr. S. Griffith.	Acute third attack; characteristic intense symptoms; vague tumor about cæcum.	Diffusely gangrenous appendix, partly protected by adhesions to inner side of cæcum; free pus in abdomen.	Vertical incision; appendectomy; toilet; pack.	Death on second day from septic peritonitis.
4. Male, 17 years. Dr. Branson.	Subacute attack, 3d day; subsiding mumps; severe attack four years previously; congenital right inguinal hernia present; intensifying symptoms; low tenderness; flexed thigh.	Appendix attached to inguinal ring and partly protected by old adhesions; free pus running down into pelvis; diffuse suppurative appendicitis; multiple abscesses, hemorrhages and gangrenous areas in walls and meso-appendix.	Low oblique incision; appendectomy; toilet; pack.	Death on eighth day from slowly progressing septic peritonitis.

	Symptoms.	Pathology.	Operation.	Result.
5. Male, 13 years. Dr. Norton.	Acute attack, 2d day; second severe attack within two months; intensifying usual symptoms.	Appendix acutely bent, cystic at end; gangrenous in spots; turned in and up; free pus in abdomen.	Long vertical incision; appendectomy; toilet; pack.	Death in two days from septic peritonitis.
6. Male, 28 years. Dr. Munson.	Acute attack, 22 hours; indigestion, vomiting, constipation, distention, rising fever and pulse; cardinal symptoms all very marked.	Gigantic appendix; diffuse gangrene; weakly and partially wrapped in omentum; free pus in abdomen.	Long oblique incision; appendectomy; toilet; pack; secondary suture.	Recovery; slow union from buried silk stitch infection.
7. Female, 13 years. Dr. Grimshaw.	Acute first attack, 3d day; usual symptoms severe; indistinct tumor about cæcum.	Appendix gangrenous in spots; partly protected by soft adhesions; pointing inward; free pus in abdomen.	Vertical incision; appendectomy; toilet; pack; secondary suture.	Recovery; primary union.
8. Female, 17 years. Dr. Grimshaw.	Acute first attack, 2d day; all symptoms severe; indistinct tumor about cæcum; menstruating.	Diffuse gangrene of appendix, partly protected by soft adhesions; pointing up on outer side of cæcum; free stinking pus running down lateral gutter.	Oblique incision; appendectomy; toilet; pack; secondary suture.	Recovery; union delayed by wound infection; beginning hernia.
9. Female, 15 years. Dr. P. G. Souders.	Acute attack, end of 2d day; began with diarrhoea and dysmenorrhœa; typical severe picture.	Enormous pendent, diffusely gangrenous, unprotected appendix and meso-appendix; free pus running down lateral gutter into pelvis.	Long oblique incision; appendectomy; toilet; pack; secondary suture.	Recovery; slow union from stitch infection.
10. Female, 20 years. Dr. D. W. Shoemaker.	Acute attack, 2d day; severe usual symptoms; pelvic irritation; menstruating.	Endo- and parietal suppurative appendicitis; retained concretion; old and recent adhesions; appendix hanging into pelvis, which was filled with free pus.	Low oblique incision; appendectomy; toilet; pack; secondary suture.	Recovery; primary union.
11. Male, 16 years. Dr. Campbell.	Subacute attack, 5th day; suddenly intensifying; severe symptoms; tumor about cæcum.	Gangrenous, perforated appendix partly wrapped in omentum; free pus and concretion in abdomen.	Oblique incision; appendectomy; toilet; pack.	Death on third day from septic peritonitis.
12. Male, 22 years. Hahnenmann Hospital.	Subacute attack, 3d day; supervening acute cardinal symptoms; increasing distention and pulse; falling temperature.	Gangrenous perforation; no adhesions; appendix bent and pointing inward; free pus in abdomen.	Vertical incision; appendectomy; toilet; pack; secondary suture.	Recovery; primary union.
13. Male, 45 years. Dr. Lange.	Acute attack, 36 hours; sudden aggravation of typical symptoms; distention; constant vomiting; silent belly.	Diffusely gangrenous, unprotected appendix; large amount of free pus in abdomen.	Long oblique incision; appendectomy; toilet; pack.	Death from septic peritonitis; primary improvement; sudden distention, vomiting, etc., on 3d day.

	Symptoms.	Pathology.	Operation.	Result.
14. Male, 38 years. Dr. Norton.	Acute attack, 6th day; typical symptoms; multiple tenderspots; high temperature and pulse; increasing distention and constipation; belching.	Three distinct abscesses, one containing gangrenous appendix outside of cecum; another below cecum; the third under liver; large quantity of free pus in abdomen.	Vertical incision; appendectomy; evacuation of abscesses; toilet; pack; partial secondary suture.	Recovery; primary union, except at drain.
15. Male, 46 years. Dr. Malin.	Acute attack, beginning of 2d day; intense cardinal symptoms; distention; obstipation, vomiting.	Gangrenous perforation; old exudative parietal appendicitis; no adhesions; pendent, bent appendix; pus running down into pelvis.	Long oblique incision; appendectomy; toilet; pack.	Death in two days from septic peritonitis.
16. Female, 15 years. Dr. Esrey.	Acute first attack, 6th day; menses due; cardinal symptoms; distention; obstipation; vomiting; restlessness; high pulse and temperature.	Gangrenous, pendent, unprotected appendix; large quantity of free pus in abdomen.	Long oblique incision; appendectomy; toilet; pack.	Death from septic peritonitis in 20 hours.
17. Female, 27 years. Dr. Sanderson.	Acute attack, 3d day; marked cardinal symptoms; high temperature and pulse; distention; tenderness extending to costal margin; menstruating; previous attacks.	Appendix feebly wrapped in omentum; old adhesions to liver and gall-bladder; large quantity of free pus in abdomen; diffuse suppurative appendicitis with extensive gangrenous areas.	Long vertical incision; appendectomy; toilet; pack; partial secondary suture.	Recovery; union partly primary and partly by granulation.
18. Male, 45 years. Dr. Myers.	Acute attack, 2d day; one very severe previous attack; intensifying symptoms; cardinal, distention, belching, obstipation, temperature and pulse.	Appendix gangrenous in spots and unprotected; free pus in abdomen.	Long vertical incision; appendectomy; toilet; pack.	Death on second day from septic peritonitis.
19. Female, 28 years. Dr. Guernsey.	Acute attack, 20 hours; indigestion, menses, diarrhœa; then distention, obstipation, rising temperature; cardinal symptoms marked.	Appendix pendent, bent, gangrenous in spots; suppurative parietal appendicitis; free pus in abdomen.	Long oblique incision; appendectomy; toilet; pack; secondary suture.	Recovery; primary union.
20. Male, 36 years. Dr. Norton.	Subacute attack, end of second day; primary subsidence of usual symptoms; aggravation with distention, obstipation and belching.	Appendix gangrenous through distal two-thirds; unprotected; free pus in abdomen; gangrene supervening upon chronic exudative appendicitis.	Long oblique incision; appendectomy; toilet; pack.	Death in two days from septic peritonitis.
21. Male, 17 years. Dr. Thatcher.	Acute attack, 12th day; profound collapse; distention; general tenderness; operation 8 hours later after response to restoratives.	Sloughing gangrenous appendix; free concretion; seven distinct abscesses following usual routes; belly full of stinking sero-pus.	Long oblique incision supplemented by one at right angle; evacuation of abscesses; appendectomy; toilet; pack.	Death in 24 hours from acute sepsis.

	Symptoms.	Pathology.	Operation.	Result.
22. Female, 62 years. Dr. Kurtz.	Acute attack, 3d day; second attack within two months; usual symptoms marked.	Appendix bound down by old adhesions and pointing toward pelvis; perforated near middle; leak through adhesions; free pus in abdomen.	Long oblique incision; appendectomy; toilet; pack.	Death on third day from septic peritonitis.
23. Male, 27 years. Dr. Gieser.	Acute attack, 48 hours; retracted, very hard, silent abdomen; rising temperature and pulse; restlessness and abdominal face; obstipation, belching and nausea; diffuse tenderness, worse to right of umbilicus; cessation of pain.	Gangrenous perforated appendix imperfectly wrapped in omentum, pointing toward umbilicus; escaped concretions; belly full of free pus.	Long vertical incision; toilet; pack.	Restoration of peristalsis; arrest of peritonitis; death from septicæmia on 4th day.

CLASS IV.—*Interval Operations.*

	Symptoms.	Pathology.	Operation.	Result.
1. Male, 26 years. Dr. Wilbur.	Relapsing form; several irregularly recurring mild attacks, then a very severe one.	Appendix bent inward; dilated end; chronic exudative endo- and parietal inflammation.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union.
2. Male, 30 years. Dr. Tuller.	Relapsing form; frequent attacks and progressive invalidism for 7 years.	Long appendix with retention cyst wound round to outer side of cæcum and buried in old adhesions; very hard to find appendix.	Intermuscular supplemented by oblique incision; appendectomy; pack; secondary suture.	Recovery; primary union; beginning hernia.
3. Female, 23 years. Hahnemann Hospital.	Relapsing form; recurring attacks for 5 years.	Pendent appendix; firmly buried in adhesions.	Oblique incision; appendectomy; suture.	Recovery; primary union.
4. Male, 29 years. Hahnemann Hospital.	Irregularly recurring form; recent severe attack.	Extensive recent and old adhesions bending appendix to right.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union.
5. Male, 21 years. Hahnemann Hospital.	Relapsing form; several attacks, one a month previously; small, hard tumor.	Appendix wrapped in omentum.	Oblique incision; appendectomy; stump buried; suture.	Recovery; primary union.
6. Male, 17 years. Dr. Garrison.	Relapsing form of several years' standing.	Exudative inflammation of parietes and meso-appendix; well-marked endoarteritis in latter.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union.
7. Female, 42 years. Dr. Bartlett.	Relapsing form; one severe attack two months previously.	Endo- and parietal suppurative appendicitis; pus retained by bend.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union; no hernia.

	Symptoms.	Pathology.	Operation.	Result.
8. Male, 35 years. Dr. J. P. Lukens.	Relapsing form; four previous attacks; last one severe.	Appendix imbedded in outer side of cæcum by very extensive recent adhesions.	Oblique incision; appendectomy; pack; secondary suture.	Recovery; slow union from wound sepsis; no hernia.
9. Male, 12 years. Dr. Ingersoll.	Recurring form; three attacks; last one severe and protracted.	Appendix bent; retained coprolith; periappendicular adhesions; chronic endo- and parietal appendicitis.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union; no hernia.
10. Male, 26 years. Dr. J. E. Wright	Relapsing attacks for several years; recovering from long severe one; fever, distention and diarrhœa.	Tubercular peritonitis; appendix bent, perforation sealed by omental adhesion; similar leaks in small intestine; endo- and parietal tubercular appendicitis.	Appendectomy; intestinal suture; pack.	Recovery; healing by granulation; excellent health 17 months later; no hernia. Reported in <i>North American Journal of Homœopathy</i> , April, 1897.
11. Male, 37 years. Hahnemann Hospital.	Relapsing form; severe attack two months before.	Large, bent, thickened, congested appendix containing retained, hard coprolith; beginning pressure necrosis; a few soft adhesions.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union.
12. Male, 38 years. Dr. Clay.	Relapsing form; one protracted severe attack; tenderness low.	Appendix adherent to pelvic brim wrapped in omentum and filled with pus; chronic inflammatory changes in wall.	Oblique incision; pack; secondary suture.	Recovery; primary union; subsequent discharge of silk ligature from stump of appendix; no hernia.
13. Male, 50 years. Dr. Faulkner.	Fourteen attacks of so-called hepatic colic; tenderness and tumefaction above and inside McBurney point.	Appendix buried in numerous old adhesions, pointing inward and upward.	Vertical incision; appendectomy; stump buried; suture.	Recovery; primary union; no hernia.
14. Female, 45 years. Dr. Gerberich.	Recurring form; several mild and one typical severe attack.	Appendix firmly adherent to ilium and bent inward; retained pus; chronic exudative parietal inflammation.	Oblique incision; appendectomy; stump buried; suture.	Recovery; primary union.
15. Male, 27 years. Dr. Romig.	Recurring mild attacks; expectation of isolated residence.	Appendix bent inward and cystic at end; chronic exudative inflammation of wall and meso-appendix; endo-arteritis.	Intermuscular incision; stump buried; suture.	Recovery; primary union; no hernia.
16. Female, 26 years. Dr. Branson.	Relapsing form; numerous attacks, usually at menstrual period.	Flexion, retention cyst; chronic inflammatory exudates in walls and mesentericolum.	Oblique incision; appendectomy; stump buried; suture.	Recovery; primary union; no hernia.
17. Female, 27 years. Dr. Dock.	Close of a severe and prolonged attack.	Appendix pendent and buried in abundant soft adhesions.	Intermuscular incision; stump buried; suture.	Recovery; primary union.

	Symptoms.	Pathology.	Operation.	Result.
18. Female, 40 years. Dr. Clay.	One severe attack; relapsing form.	Flexion to left; retained pus; suppurative and exudative parietal inflammation.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union; no hernia.
19. Female, 13 years. Dr. Stirk.	Relapsing form; several attacks.	Flexion to right; exudative endo- and parietal appendicitis.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; slow union from catgut infection; no hernia.
20. Male, 18 years. Dr. McLeod.	Recurring form; a number of attacks, last severe.	Large appendix bent outward and imbedded in cæcum by adhesions	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; union delayed by localized infection; no hernia.
21. Female, 47 years. Dr. Quinby.	Relapsing form; frequent attacks.	Appendix pointing into pelvis; soft adhesions; catarrhal chronic endoappendicitis.	Vertical incision; appendectomy; stump buried; suture.	Recovery; primary union.
22. Male, 30 years. Dr. Richardson.	Close of severe, protracted attack; probably previous ones; tender tumor above and inside of colon.	Appendix pointing upward and inward; very firmly imbedded in old adhesions; dug out with great difficulty; suppurative endo-parietal and peri-appendicitis.	Vertical incision; appendectomy; pack.	Recovery; healing by granulation.
23. Female, 43 years. Dr. G. C. Webster.	Relapsing appendicitis with a number of moderate attacks and general ill-health.	Appendix bent outward and cystic; old adhesions; suppurative, endo- and parietal appendicitis; beginning gangrene at one spot.	Vertical incision; appendectomy; pack; secondary suture.	Recovery; primary union.
24. Male, 18 years. Hahnemann Hospital.	Recurring appendicitis; three attacks, last one severe.	Record of local conditions wanting.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union.
25. Male, 21 years. Dr. Berkenstock.	Relapsing form; numerous attacks.	Exudative, endo- and parietal appendicitis; old adhesions; flexion; retention cyst.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union; adhesion pain for some time.
26. Male, 20 years. Hahnemann Hospital.	Relapsing form; three attacks within a year.	Appendix bound down to under and to outer side of cæcum by old adhesions.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union.
27. Female, 24 years. Dr. Cheney.	Relapsing form; cardinal symptoms; persistent ill-health.	Appendix bent inward; cystic at end, adherent to ilium.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union.
28. Female, 23 years. Dr. Elmer.	Relapsing form; several and one severe attack.	Appendix long; filled with pus; thickened walls; deeply congested.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union.
29. Male, 21 years. Hahnemann Hospital.	Severe attack eight months previously; cardinal symptoms since.	Appendix pendent; full of pus; moderately firm adhesions; exudative parietal inflammation.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union.

	Symptoms.	Pathology.	Operation.	Result.
30. Male, 33 years. Dr. Chase.	Recurring form; several attacks.	Flexion to left; soft adhesions; lumen full of pus; threatening perforation.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union.
31. Male, 26 years. Dr. Quinby.	Recurring form; number of attacks during several years.	Pendent appendix; extensive soft and firm adhesions.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; primary union.
32. Female, 24 years. Dr. C. D. Smedley.	Attack 3 months previously, since which, cardinal symptoms; probable attacks before.	Lumen contains pus; exudative parietal and peri-appendiceal inflammation.	Intermuscular incision; appendectomy; stump buried; suture.	Recovery; union delayed by localized wound sepsis.
33. Female, 14 years. Dr. J. W. Hassler.	Close of severe attack coming on when menses were due.	Suppurative endo- and parietal appendicitis; localized fibrinous peritonitis; pendent appendix.	Vertical incision; appendectomy; stump buried; suture.	Recovery; primary union.
34. Male, 19 years. Dr. Lange.	Close of severe attack with dangerous symptoms of peritonitis; tender tumor outside of cæcum.	Appendix upward and outward; large and thick; two leaks sealed by firm intestinal adhesions; fibrinous peritonitis over entire right side of abdomen; suppurative endo- and parietal appendicitis.	Vertical incision; appendectomy; pack; partial secondary suture; gauze drain.	Recovery; union partly primary, partly by granulation.
35. Female, 17 years. Dr. McGill.	Relapsing form; probably frequent attacks; just recovered from long and severe one.	Appendix buried in outer side of cæcum by old and recent adhesions; lumen contains pus; beginning gangrene of inner coat in spots; exudative parietal inflammation.	Intermuscular incision; appendectomy; stump buried.	Recovery; primary union.
36. Male, 35 years. Hahnemann Hospital.	Relapsing form; several attacks during two years.	Appendix bent outward and upward and fastened by soft adhesions.	Oblique incision; appendectomy; stump buried; suture.	Recovery; primary union.
37. Female, 26 years. Dr. Still.	Relapsing form; attacks preceded by irritative diarrhoea; apparently induced by overexertion; occurring at menstrual period.	Appendix pendent; acutely bent inward toward pelvis; end thickened, congested and cystic.	Intermuscular incision; appendectomy; stump buried.	Recovery; primary union.

The 119 cases can again be divided into

Acute Appendicitis, 59, of which there were in Class I., 22; Class II., 18; Class III., 19.

Subacute Appendicitis, 23, of which there were in Class I., 6; Class II., 13; Class III., 4.

Chronic Appendicitis, 37; of the recurring form, 8; of the relapsing, 29.

While the majority of the subacute variety resulted in comparatively safe abscesses, one of these sneaked on to a fatal septicaemia by breaking through the peritoneum and burrowing up and down the back (Case 20, Class II.). In the four subacute cases of Class III. (4, 11, 12 and 20), operated, respectively, on the 3d, 5th, 3d and 2d day, acute symptoms suddenly supervened, with a diffuse peritoneal infection, for which in three (4, 11 and 20) operation was undertaken too late. In the six similar cases of Class I. (5, 6, 11, 15, 17, 19), operated, respectively, on the 3d, 4th, 8th, 5th, 7th and 4th day, good fortune kindly permitted a later operation to be in time. Case 9 (Class I.) obligingly developed an attack three hours before the time set for an interval operation. The distal cyst and the faecal lump retained by the spasm of the up-curved organ would lead us to term the seizure an appendicular colic, yet the congested, swollen, tense, erect appendix reminded one strongly of those we find a few hours later, gangrenous or perforated, unprotected and producing a fatal peritoneal sepsis. This was the earliest operation during an attack; extra-appendiceal suppuration was found as soon as twenty hours after the inception (Case 19, Class III.).

The *peritoneum* was involved in 97 patients, the process varying with the quantity and variety of the infection.

(1.) A purely adhesive or circumscribed fibrino-plastic peritonitis was present in 43; Class I., 18; Class IV., 25.

(2.) A circumscribed fibrino-purulent peritonitis in 27 (Class II.), and was associated with retro-peritoneal phlegmons in 4.

(3.) Multiple abscesses or a progressive fibrino-purulent peritonitis in 6; Class II., 4; Class III., 2; resulting in peritoneal sepsis in 1 (Case 21, Class III.).

(4.) Diffuse, fibrino-purulent (11) or diffuse purulent (10) peritonitis in 21 (Class III.).

Case 16 (Class I.) and Case 34 (Class IV.) were operated during or just after the subsidence of a severe peritonitis, on account of which in the former I had refused operation, while in the latter this was deemed useless by the attendant. Such symptoms as distention, constipation, vomiting, collapse, etc., were present and severe; yet, when operated, only an extensive fibrinous peritonitis with firm protective adhesions was found. In a similar case, recently seen, I declined to operate for the same reason,

but, to our surprise, the symptoms all subsided, and an interval operation was decided on. During convalescence she was taken, presumably after a slight exertion, with a fulminating peritonitis which quickly proved fatal. The autopsy showed an extensive fibrinous peritonitis, but the appendix had sloughed off from the cæcum, allowing the intestinal contents to pour out through a large, imperfectly-protected leak.

Case 4 (Class I.) presented a condition I never before have met with. There was the history of a strain producing severe pain toward the loin, and, aside from this, tenderness only; normal bowels, temperature and pulse, soft abdomen, etc. The completely gangrenous appendix lay to the outer side of the cæcum without the vestige of an adhesion to intestines or omentum and buried in a mass of plastic lymph.

Case 3 (Class II.) illustrates the mode of formation of a retro-peritoneal phlegmon. The appendix was curled backward and upward into the subcæcal fossa, its very tip perforated and communicating with a small intraperitoneal abscess. A minute opening led from this abscess into a large extra-peritoneal pus cavity in the retrocæcal connective tissue; later on a counter-opening in the loin was required to obtain satisfactory drainage.

In Case 21 (Class III.), we have the completed picture of a progressive fibrino-purulent peritonitis. First, a sloughing appendix and a free concretion in the primary abscess to the left of the cæcum. Then a series of distinct abscesses, six in number, following the two characteristic inward courses: (1.) Downward and inward, over the bladder, across the pelvis, and up the other side to the left hypochondrium. (2.) Inward and upward along the ascending and under the transverse colon to the same point. Finally, a leak and a fulminating peritoneal sepsis.

Case 14 (Class III.) shows the outward course of such an infection. First, a gangrenous appendix pointing west and in the primary abscess on the outer side of the cæcum. Then, the second one, following the upward course, under the liver; and the third, the downward, toward the pelvis. Finally, a slower and less virulent peritoneal involvement. The fact that these abscesses appear to have no connection with each other was also clearly seen, for there were several coils of intestine

interposed between the primary purulent focus and those under the liver and at the brim of the pelvis.

In Case 8 (Class II.) there were the multiplying abscesses into and across the pelvis, but instead of lighting up a diffuse peritonitis, they endangered life by an acute systemic infection.

Still another form of the same process was present in Case 29 (Class II.). There were a number of distinct abscesses containing small quantities of more or less inspissated pus and imbedded in an enormous mass of soft, gelatinous, plastic lymph which filled the entire right iliac fossa. The course had been slow and the sepsis, though chronic, had brought the patient to a desperate condition.

Case 23 (Class III.) is also an instructive one. At the end of the second day the belly was full of free pus, retracted, board-like and silent. After complete evisceration, the cavity was deluged with salt solution, a complete toilet made, and an abundant pack introduced. Peristalsis was promptly re-established by the injection of Epsom salts, and the abdomen remained soft and flat. The autopsy showed only a few fibrinous adhesions and no pus, but every evidence of an acute septicæmia, which killed on the fourth day.

The conditions found in the appendix itself can be classified as follows:

(1.) An exudative parietal inflammation in 27: Class I., 10; Class II., 2; Class IV., 15.

(2.) A suppurative parietal inflammation in 26: Class I., 12; Class II., 4; Class III., 4; Class IV., 6.

(3.) A catarrhal endo-appendicitis in 16: Class I., 9; Class IV., 7.

(4.) A suppurative endo-appendicitis in 27: Class I., 11; Class II., 1; Class III., 2; Class IV., 13.

(5.) Tubercular appendicitis in 3: Class II., 2; Class IV., 1.

(6.) Localized gangrene involving all the coats in 14: Class I., 2; Class II., 1; Class III., 9; Class IV., 2.

(7.) Diffuse gangrene in 23: Class I., 3; Class II., 8; Class III., 12.

(8.) Perforations in 21: Class I., 4; Class II., 7; Class III., 7; Class IV., 3.

(9.) Concretions in 13: Class I., 1; Class II., 6; Class III., 4;

Class IV., 2. As corroborating an observation made in 1891,* I might add that protective adhesions, more or less successful, were present whenever a concretion was found.

In Cases 13, 23, 24 and 25 of Class I., we were enabled to observe a condition which has not received much attention. While the peritoneum showed little or no involvement, the inflammatory process, a phlegmon in fact, judging from a study of the walls of the appendix, was seen to have spread over the cæcum and even to the lower ileum. Besides this there were purulent thrombi in the vessels of the meso-appendix. They were all characterized by marked fever, distinct cardinal symptoms, but no signs of peritonitis. In Case 25 death resulted from acute septicæmia; in the others, recovery was delayed by persistent, erratic and high temperature, while Case 24 developed a right and then a left pneumonia.

PREVIOUS ATTACKS are mentioned in 65:

Class I.: several, 7; one, 4; none, 1; not noted, 16.

Class II.: several, 6; not noted, 25.

Class III.: several, 2; one, 4; none, 4; not noted, 13.

Class IV.: relapsing form: several, 19; one, 10; recurring form: several, 8.

Of ten cases in which previous attacks are specified in Class III., four developed diffuse peritonitis during their first, and four during their second seizure.

Position of the Appendix.—Downward, pendent or “South,” 54; outward, or “West,” 27; inward, or “East,” 20; backward or subcæcal, 2; forward, 1; not noted, 15.

The direction of the appendix apparently has a bearing on the resulting processes. For example:

Class II.: S. or S.W., 12; W. or N.W., 10; S.E., 8; backward, 1; *E. or N.E., none.*

Class III.: S.E., 11; E. or N.E., 9; outward, 2; not noted, 1; *S., S. W. or N. W., none.*

The so-called “easterly” positions, E., N.E., and to a less degree S.E., appear from the above to be more frequently associated with diffuse peritoneal infection; in the westward turn, W., S.W., or N.W., encysted abscesses predominate. This conclusion is strengthened, to a certain extent, by the proportionate

* HAHNEMANNIAN MONTHLY, 1891, p. 645.

absence or presence, respectively, of protective adhesions found in the other two classes :

Class I. : S. or S.W., 6, and W. or N.W., 4, with adhesions in all ; S.E., 6, with adhesions in 5 ; E. or N.E., 3, with but slight adhesions in 1 (forward, 1 ; backward, 1 ; not noted, 7).

Class IV. : S. or S.W., 7, with adhesions in all ; W. or N.W., 11, with adhesions in 10 ; S., 4, with adhesions in 2 ; E. or N.E., 8, with imperfect protection in 2 (not noted, 7).

I have found this observation a prognostic aid in deciding the question of operation in otherwise doubtful cases. Unfortunately those presenting the greatest diagnostic difficulties, *i.e.*, the appendices pointing inward, or inward and upward, or downward and inward are the most dangerous. Hence, if with the recognition of appendicitis, tenderness or tumefaction is found inside, or inside and above McBurney's point, either coincidentally or even independently, operation is strongly called for. So too is surgical intervention the safer course when the sore spots are toward or across the pelvis, the latter being the route of the downward multiplying abscesses.

It would seem that an appendix hanging into the pelvis is not so much to be dreaded :

Class I., 1, with adhesions ;

Class II., 6 encysted abscesses ;

Class III., 1, but with numerous adhesions ;

Class IV., 1, well protected.

This position was found six times in females, three times in males. It may be that such protection is due to the fact that infection in the pelvis must come from the distal portion of the appendix, and the nearer the tip this occurs the more likely it is to be sealed by adhesions. Proximal lesions are supposed to allow so rapid and abundant escape of the infection that limitation is impossible. This observation has been extensively corroborated in my experience. In one case (Class II., 11), the cæcum occupied its foetal position close to the right kidney.

Day of Operation.—Of the 82 cases operated during attacks this was as follows :

First day, 5 ; second day, 20 ; third day, 14 ; fourth day, 12 ; fifth day, 3 ; sixth day, 3 ; seventh day, 4 ; second week, 16 ; third week, 1 ; fourth week, 1 ; not noted, 3.

Comparing Classes I. and III., which are detailed for this purpose, we see that the latter came to operation as soon, if not sooner, than the former. Besides emphasizing the element of chance, this shows the difficulty of distinguishing "malignant" from "benign" attacks before the belly is opened.

Class I.: First day, 3; second day, 8; third day, 6; fourth day, 8; seventh day, 1; second week, 1; not noted, 1.

Class III.: First day, 2; second day, 11; third day, 5; fifth day, 1; sixth day, 2; second week, 1; not noted, 1.

Sex.—Males, 80; females, 39.

Class I.: Males, 19; females, 9.

Class II.: Males 24; females, 7.

Class III.: Males, 15; females, 8.

Class IV.: Males, 22; females, 15.

In Classes I. and III. the proportion of females is strikingly large as compared with the safer Class II., as it is also in the entire series, judging from published statistics (4 to 1). Their preponderance in Class IV. may be accounted for by the greater willingness of the sex to submit to operation. Of the 39 females, the attacks came at or about the menstrual period in 12; 7 had either not begun or had ceased menstruating; in 20 no mention is made of this.

Age.—Under 10 years, 7; males, 4; females, 3.

10 to 20 years, 25; males, 15; females, 10.

20 to 30 years, 43; males, 30; females, 13.

30 to 40 years, 22; males, 17; females, 5.

40 to 50 years, 15; males, 9; females, 6.

Over 50 years, 7; males, 5; females, 2.

It would appear from these data that appendicitis occurs among males most frequently between 20 and 30 years, 10 to 20 and 30 to 40 having each about one-half the number. Among females those between 10 and 20 and 20 and 30 are about equal and predominate, while 30 to 40 and 40 to 50 years show approximately half as many. The youngest was 8 and the oldest 72 years of age.

Occupation.—Active, 59; sedentary, 60; in three a strain was given as an exciting cause.

I have classed as "sedentary" all business men whose work is not laborious, single and married ladies, physicians, ministers, teachers, students, etc. Under "active" are mechanics, labor-

ers, domestics, farmers, nurses, those whose business requires exertion, and school-boys and girls.

Symptoms.—The *cardinal* symptoms were present to a greater or less degree in all the attacks (82), as well as in Class IV. (37); so too was the coated, flabby, indented tongue. The other concomitants are given when their presence was sufficiently marked to be specifically noted in the records. Thus, *constipation* was met with in 23 (Class I., 8; Class II., 4; Class III., 11), and amounted to obstipation in 6. The bowels moved normally in 1 (Class I.); *diarrhœa* preceded the attack in 1 (Class I.); continued during the seizure in 1 (Class II.); ushered it in and was associated with dysmenorrhœa in 3 (Class III., 2; Class IV., 1). A diffuse *bloating* was observed in 25 (Class I., 6; Class II., 6; Class III., 13), and a silent, retracted belly in 1 (Class III.). A localized *tumefaction* was of course found in all of Class II., also in 8 of Class I., 5 of Class III., and 5 of Class IV. (49.) *Vomiting* accompanied bloating and constipation in 14 (Class I., 3; Class III., 11). *Pelvic symptoms*, *i.e.*, vesical and rectal irritation, are mentioned in 6 (Class I., 1; Class II., 3; Class III., 2), and a predominant loin tenderness in 2. The *temperature* and *pulse* showed a marked increase in 42 (Class I., 6; Class II., 27; Class III., 9), while there was a falling temperature and rising pulse in 1 (Class III.). *Delirium* was noted in two cases of phlegmonous appendicitis, and great restlessness, in three of diffuse septic peritonitis.

DISCUSSION OF THE PAPER OF DR. VAN LENNEP UPON APPENDICITIS.

BY WILLIAM C. GOODNO, M.D., PHILADELPHIA.

(Read before the American Institute of Homœopathy, Buffalo, N. Y., June 28, 1897.)

I HAVE been requested to review the paper just read by Dr. Van Lennep, from the medical standpoint, *i.e.*, from the point of view of the general practitioner. It is hardly possible, I may remark, to draw a sharp line of demarcation between the physician and surgeon in their relationship to appendiceal disease. The surgeon is simply the medical man prepared by especial study and experience to master the technique of opera-

tive measures. Before operative steps are taken he must occupy common grounds with the physician, but as the indications for operation have naturally been more carefully studied by surgeons as a class the general practitioner will continue to call upon qualified operators for their advice in determining the necessity and the suitable time, *hour*, even, for operation; consequently there will continue to be a medical and surgical view of the subject. I am at liberty, I believe, in this discussion, to consider all aspects of appendicitis other than the details of the operation, but as Dr. Van Lennep has dealt so fully and ably with the entire subject, I shall refer to but a few points.

First, a few comments upon the *symptoms of appendicitis*. My experience corroborates the statements of a number of observers respecting McBurney's point, which are in substance that too much is made of this focus of pain and tenderness, much more than even McBurney himself does. I have met cases in which the pain was referred to the pelvis, epigastrium, the region about the navel, the left side of the abdomen, and the right loin. It is, however, important evidence when associated with other suggestive symptoms. In two of my cases, pain and tenderness at McBurney's point, due to hernia, simulated appendicitis.

Nausea and vomiting are present in nearly all cases of an acute character. If the vomited matters become of a coffee-ground character the outlook is exceedingly grave. Either constipation or diarrhoea may exist or these conditions may alternate.

Much is made, and justly, of the rigidity of the right rectus abdominalis muscle, but little is said of the circumscribed muscle-tension often met, and which Shrady reported as occurring 120 times in 300 cases.

Temperature is of little value in estimating the seriousness of an attack, unless it be a low temperature in association with marked local organic (necrotic) changes. The pulse-rate is very important. The pulse rise is usually out of proportion to that of the temperature. I frequently meet a temperature of 100° or 101° with a pulse-rate of 110, 120 or 130.

It is important to remember that the disease occasionally develops insidiously, particularly in children. The premonitory symptoms are gastric irritability, colicky pains, disturbance of

the bowels, etc. After these have existed for a variable period of time, the disease develops slowly, or with the usual acute onset.

When the symptoms are of high grade for several days and a tumor cannot be felt, there is great danger of perforation and its consequences. If such symptoms do not appear after about the fourth day, it may be assumed that protective adhesions have developed, but this should not lull us into a feeling of security.

The deep situation of the appendix behind the cæcum makes it difficult to discover a tumor when the abdominal walls are thick or tense. Examinations through the rectum or vagina or the employment of an anæsthetic are very useful under such circumstances.

In the consideration of every case of suspected appendicitis two vital questions arise and must be answered.

1. Has the patient appendicitis? and often without delay:
2. Shall operation be advised? and if so, when.

Has the patient appendicitis? In considering the diagnosis of appendicitis, I desire to acknowledge at the outset the very great debt we physicians owe our surgical brethren, for while admirable observations have been made by various physicians, the present advanced position of the subject is due largely to the painstaking observations of the surgeons. Notwithstanding the subject has been so much studied and written upon during the past few years, physicians in general are not sufficiently alive to the very great importance of the diagnosis of appendicitis during its earliest hours of development. Too many cases, as I know from personal observation, are allowed to continue for several days with diagnoses of indigestion, intestinal disorder, typhlitis, etc. Again this failure to recognize appendicitis in its early days is responsible for many of the sanguine statements respecting its control by medical treatment, the appendicitis escaping the attendant altogether, its consequences only being detected. We must never lose sight of the fact that in very many cases of appendicitis, due to the small size, deep-seated position, and non-vital character of the appendix, pathological changes progress to a degree necessary to excite serious peri-appendiceal changes or general septic peritonitis. It seems impossible at present also to distinguish

between mild catarrhal cases and those which have progressed to necrosis. The latter variety often progresses to perforation, attended by the mildest symptoms, which is, perhaps, the strongest argument advanced for the operation of all cases in the early stage. I have within the past twelve months seen four of these cases, all of which proved fatal, three having reached the stage of necrosis and serious attending symptoms without the true nature of the cases having been detected. These undiscovered cases, many of which die from peritonitis without the cause ever being discovered, should be kept in mind in making up our estimates of mortality from appendicitis. Personally I look back with sorrow upon cases of peritonitis occurring in my earlier experience and progressing to a fatal issue which I now know were secondary to a primary appendicitis, the significance of the symptoms indicative of the primary lesion I did not at that time understand. In the early period of our developing knowledge of this subject, I even made bold to state that I had never lost a case of appendicitis, while I now know my mortality in that disease had been considerable.

Much of the writing upon this subject suggests comparative ease in diagnosis. It would seem only necessary to learn of a sudden attack, characterized by pain and tenderness at McBurney's point, rigidity of the muscular tissue of the right side of the abdominal wall, and some degree of gastro-intestinal disorder, in order to express an opinion. That the diagnosis is not always so easy is shown by the case of a gentleman, of whom I have knowledge, who was examined by several eminent surgeons in New York and Philadelphia, and pronounced free from disease of the appendix, his symptoms being subsequently shown to be due to an ulceration of that organ with adhesions. I have also seen several appendices, after removal, which were free from any morbid changes.

In thinking over what I might add as a supplement to Dr. Van Lennep's remarks upon the diagnosis of appendicitis, I have concluded to say a few words upon its separation from typhoid fever, which subject the doctor seems to have relegated to me for fuller consideration. At the outset I may state that I have been especially impressed during the past two years by the frequency with which the following question has arisen:

"Is this a case of appendicitis or typhoid fever?" Very recently a surgeon said to me, "If you can assure me this case is not one of typhoid fever, I am ready to operate for appendicitis." As most cases of appendicitis are of an acute character, we have to distinguish between this disease and typhoid fever in its earliest days. Between typical cases of these affections there is no difficulty in discriminating but, alas, how few cases of this character we meet. During the early days of the disease, if we are limited to the older diagnostic criteria, it is impossible to assert with certainty the typhoid character of any case, no matter how suspicious the symptoms may make us that the case is one of typhoid fever. A prodromic period, even if typical, helps to a conclusion but proves nothing; and the same may be said of the temperature range which is seldom of the type which was at one time considered so characteristic. Both may be met in connection with appendicitis. Even if we add to these the headache, vertigo, epistaxis, general pains, and gastro-intestinal and abdominal conditions met in typhoid fever, the existence of this affection is not proven; for such a grouping has been not rarely met, and the subsequent course of the case excluded typhoid fever. Much has been made of gurgling and tenderness in the right iliac region, but both may be present in appendicitis, the latter almost certainly, and may even be associated with diarrhœa. The presence of enlarged spleen and a roseolous eruption by the close of the first week, makes the diagnosis of typhoid fever quite certain, but it is too late to be of much practical value in differentiation. If the foregoing statements are correct, it follows that cases arise in which, if we are limited to the commonly-accepted elements of diagnosis, we cannot, with certainty, state that a given case is one of typhoid fever, and not appendicitis. Fortunately two recent observations have added much to our ability to recognize this disease, viz., Ehrlich's diazo reaction and Widal's test. With the first, especially, I have had favorable experience.

Ehrlich's Test.—This test requires comment for several reasons. First, it has been so little employed that few are familiar with it; secondly, it has been adversely criticised by eminent authorities due to erroneous methods of procedure; and thirdly, its application has been improved, giving more certain results.

The test fluid should be freshly prepared upon the day of use from two stock solutions, by mixing thirty parts of No. 1 with one part of No. 2.

No. 1 stock solution is prepared by mixing hydrochloric acid, 50 parts; distilled water, 1000 parts; and sulphanilic acid, q. s., ad. sat. This solution should be kept a few days before using and be occasionally shaken.

No. 2 stock solution consists of a one-half per cent. solution of sodium nitrate. Keep in a cool place and in a colored bottle. Renew every ten days.

Method of Use.—See that the urine is fresh and acid in reaction.

a. Mix equal parts of test fluid and suspected urine.

b. Flow one to two c.c. of ammonium hydrate upon the surface as in the ordinary cold nitric acid test for albumin.

c. Result. Carmine or garnet layer at junction of fluids if the reaction is developed. Shaking gives a pink tinge to the foam.

Errors.—Some observers speak of an orange or yellow color at the point of contact, and others have omitted the use of the ammonium hydrate altogether.

A further elaboration of this test is highly valued by some. Pour the mixture into a white porcelain dish containing a quantity of water, and if the reaction is pronounced a salmon-red color results, while a simple orange or yellow is negative.

Widal's serum test depends upon bunching and loss of motility of the typhoid bacilli in culture media when the blood or serum taken from a person suffering from typhoid fever is introduced. While the reaction cannot yet be obtained in every case of typhoid fever, increasing experience gives more and more of importance to it. In a very recent test by Eichhorst and Hoffman, 31 cases of typhoid fever and 35 cases of various forms of acute disease were employed with the result of securing the reaction in all of the former and none of the latter. Sufficient experience has not yet been had with this test during the earliest days of the disease.

Shall we advise operation, and if so, at what time, is a question we must ask ourselves upon the very first visit. The advice to operate, or not operate, must be based upon a thorough knowledge of appendicitis, and a most careful review of the

case in all its features. To state my practice in the fewest words, and without argument, I may state that my present knowledge leads me advise operation in all relapsing and recurring cases, selecting when possible the free period for the operation. In all acute cases I carefully consider operation if the symptoms do not begin to subside within 24 hours, and, of course, in all cases continuing to increase gradually up to the third or fourth day; also when very active symptoms develop at any period of the attack; and always if, by the third day, or later, there is a growing tumor, and particularly if localized superficial œdema develops. Abdominal distention (not due to opium), rapid pulse, and other evidences of general peritonitis call for operation as a last resort, but the results are of necessity exceedingly bad.

I have repeatedly heard physicians say they did not believe in the operation for appendicitis, because each case they had had operated died, when I knew certainly that in calling a surgeon, not a single one of the indications for the operation had been given proper attention; consequently all their operations had been performed too late. In opposition to this I may state that all of the cases with which I have had to do personally or through consultations, which have been operated during the first 36 to 48 hours, have recovered. I have heard of fatal cases reported as having been operated during the first 24 hours—and we know that this has occurred—but investigation of some of these satisfied me that the cases in question were much more advanced.

ANTIMONIUM SULPHURATUM ACRANTIACUM IN CHRONIC BRONCHITIS.—This remedy is regarded by many German homœopaths as one of the best for chronic bronchial catarrh. But the proper attenuation is important. In dry chronic catarrh of the bronchi, with a sputum which is expectorated with difficulty, one should always use a low trituration, 2-3x 2dgms. 3-4 times a day. It is otherwise in long-lasting catarrhs with profuse expectoration. Here from the 5-6x is required.—*Leipziger Populäre Zeitschrift für Homœopathie*, Nos. 11-12, 1897. “Le soufre doré d’antimoine a été vanté dans les catarrhes aigus et chroniques, dans les coqueluches.”—*Trousseau et Pidoux Traité de Thérapeutique et de Matière Médicale*, vol. 2, p. 752, 1847.

TRAUMATIC HYSTERIA.

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(Read before the American Institute of Homœopathy, Buffalo, June 28, 1897.)

It is an unfortunate fact that the term hysteria is most frequently a misnomer. No disease has received greater misuse from professional epithets and faulty diagnosis. To the laity the word is an expression which attracts little sympathy, for it is generally used with reference to mental incapacity and moral weakness. Those who suffer its affliction are, indeed, objects of pity, not alone on account of the seriousness of their misfortune, but from the fact that they are, like one stricken with leprosy, left to their fate. Originally the word was supposed to relate only to the womb, and hence it was spoken of as a woman's affliction. Perchance that is why so little thought was given to what was believed to be a disease natural to the female.

Preceding the middle ages slight reference to hysteria was found in the so-called medical literature. Whatever was known of it pertained mostly to the emotional or psychical form. It was associated entirely with religious frenzy which then, and for some time later, had periodical outbreaks in the form of revivals. "The earliest of these hysterical epidemics was known as the dancing mania, or the dance of St. John." Hysteria, as a disease, was only recognized or received the courtesy of medical consideration when it assumed the semblance of epilepsy. In such an age of scientific inefficiency the patient was given about as much attention as the ordinary midway dancer, and no one ventured a positive opinion as to diagnosis, or hinted at the suggestion of a cure. It is claimed that in many cases, when the paroxysm lasted too long to suit the pleasure of the onlookers, some sympathetic friend would give the unfortunate victim a kick in the stomach. This, to a considerable extent, aborted the fit, and at the same time contributed some real amusement to the audience.

Thus, it seems, in a spirit of medical emulation, we have copied somewhat the treatment of our professional ancestors. Even to-day, we are sorry to admit, the disease is too often re-

garded as a feature of emotional frenzy, and much of our therapeutic attention is about as senseless and wanting in tenderness as the ancient kick in the stomach.

In those early days, under the guise of religious fervor, this epidemic of hysteria became so pronounced that demoniac actions, the practice of flagellation and stigmatism called for the severest punishment from church and state. The same status has been equally ominous in the recent centuries, and the rigor of the law has, no doubt, unjustly punished the disease by cruel confinement when medical care would have been better. At the present time, we find a strong tendency to ascribe all of the evils, as well as the symptoms of the disease, to some emotional perversion. Thus the true diagnosis is not always made, and the treatment is very frequently irrelevant.

Hysteric manifestations and hysterio-epilepsy might properly represent the two extremes in the characterization of the malady. One is a mild and irregular form in which varied and peculiar symptoms seem to end in temporary hallucinations without any particular pathological lesions. The other is the extreme type of hysteria and epilepsy combined; in this the psychical features are prominent because of some decided reflex disorder. This form has been associated so long with the idea of ovarian and sexual disorders that it is now recognized as a disease in itself. Aside from these, there is certainly a form of hysteria which displays an individual symptomatology and a pathology which has, of late, claimed the attention of neurologists more than any other disease. It is this form which we seek to study at present.

Presuming that all diseases, and particularly hysteria, have their origin in some form of nervous irritation, we naturally seek the point of first irritation and trace the reaction to the ultimate pathological lesion. In this way our first observation shows us that all sensory or motor disorders directly or indirectly affect the brain. Thus we confirm the established opinion that the morbid anatomical condition of hysteria is located in the cerebral cortex or its deeper structure. Yet, as the cerebro-spinal system is a union of the brain, cord and the peripheral fibres, we must admit that a physiological perversion in any part of this system will sooner or later be reflected to the brain. Therefore the cause of hysteria is not necessarily in the

brain. An afferent irritation may stop before it reaches the cord, and thus it is confined to the peripheral nerves; again it may reach the cord from without, or begin in it and remain there; still again it may have its origin in or go no farther than the basal ganglia.

In every case, however, the reflex must end in the cortex, for as soon as the irritation touches the larger afferent tracts, it must terminate in the arborisations about the cortex cells. This is the field which offers the opportunity to traumatism.

Before we advance to the immediate consideration of the subject, we must understand the effects of the hysterical pathology. In a word, we may say it is a condition wherein the higher centres or brain-cells do not properly act upon the lower centres or cord-cells. The pyramidal-cells of the cortex may fail to excite a natural action in the cord-cells, or they may not have sufficient strength to curtail or inhibit the excessive irritability of the lower centres. In the same way it is found that any undue excitement of the cord, which is always observed in the neurasthenic condition, might produce both the fatigue of brain-cells and also a similar reaction upon the cord itself. These two conditions are conducive to the pathology of hysteria.

Overwork, worry, or any great expenditure of energy will use up the protoplasm of both cord and cerebral cells; and, unless the relaxation which is necessary for complete repair is obtained, this process of cell-depletion continues until volition and the intellectual process are involved, and then comes the psychical phase of hysteria. In such a state an extreme effort on the part of the brain-cells or any action from an unnatural stimulus will produce an irregular or explosive discharge of motor-force. Then we have the graver forms of hysteria and all the unwelcome reactions attendant. Such a condition is bound to leave a permanent derangement of cortex-cells; this destroys the inhibitory influence over the cord, and the long-continued functional impairment permits an organic change.

Much has been said of the nervous phase of diseases due to spinal injury and a variety of terms have been added to our literature. "Spinal concussion" has been the favorite expression for years; "railway brain," "railway spine" and "traumatic neurosis" have been used to define a variety of peculiar nervous manifestations with traumatism as a basis. It remained, however, for

Charcot to call attention to the fact that typical hysteria was often due to shock and concussion; this was particularly observed in railway injuries. It was found that some time after a concussion symptoms would occur showing the loss of touch, pain and temperature sensations. Hemianæsthesia was most frequently noticed, though disseminated and bilateral loss were frequent. In regular sequence motor insufficiency, in the form of contractures or paralysis, invariably followed; along with these, psychical or emotional signs appeared; then there would follow that irregular but numerous train of symptoms by which hysteria is cursorily recognized. Thus it has been established that hysteria is a disease which may exist as the result of traumatism.

We have previously admitted that an extreme expenditure of nervous energy causes the pathology of hysteria. It is possible for traumatism to bring about this predisposing factor. Spinal concussion creates either a minor destruction to the cord structure or it causes disseminated myelitic foci, which sooner or later degenerate enough to pervert the natural function. Either of these conditions, besides interrupting the regular flow of sensory and motor cord reflexes, perverts the trophic power until there is a waste of energy and a general functional paresis. So far no real organic lesion appears, but there is sufficient disturbance to cause the hysterical phenomena. On account of the motor cell involvement we observe the muscular tremor, contracture, or spasticity. On account of the implication of sensory cells, paræsthesia, anæsthesia and hyperæsthesia are present. Such a traumatic condition so exaggerates the natural cord function that it overtakes the brain inhibition, and causes a reactionary protoplasmic exhaustion.

We have made a further claim that the fundamental pathology is really observed in the brain. This does not, in any sense, antagonize the theory of traumatic origin. If spinal concussion has the cord influence just announced, we may understand how it pertains to the brain without any injury to the cord. Given, for instance, a concussion sufficient to shock, but not to destroy the cord texture, and we will see how quickly it reaches the brain; the slightest irritation of the larger conducting tracts is at once reflected to the end arborisations around the sensory cortex cells; there the pain is felt and there the

cerebral shock exists; as a reaction from this, the characteristic motor symptoms appear. All of this means a loss of cell protoplasm, and sooner or later exhaustion to both motor and mental brain function.

Whatever affects the cortex is liable to pervade the underlying structure, and the cranial nerves are soon implicated. Hence the unilateral or bilateral involvement of the special senses is a natural sequence. Moreover, a prolonged nervous impairment of this kind will lower the brain and cord nutrition until all the body functions are irritable and erratic. Then it is we observe that gradual disintegration of physical resistance and the loss of mental continence which is a stepping-stone to the eventual weakness of nervous debility.

It is not the object of this paper to place too great emphasis upon the traumatic origin of hysteria. Too much is often claimed for this pathological cause in all diseases. Still, it is a factor, the scope of which we do not always appreciate sufficiently. While there is a tendency on the part of patients to simulate, particularly when a corporation is at fault, there is, nevertheless, an undoubted hysterical condition which we can trace to spinal injuries. These do not always manifest the severe symptoms until years after the accident, but, when they do appear, they are of the severest character. The fact is, too little sympathy is given to patients with this affliction: they are scolded and palliated without credence for their suffering, while the disease progresses until it is beyond our cure. It is true that the hysterical contraction is not a paralysis, and yet the incapacity may be just as great. The sensory disturbances in the hysterogenic zones may not show any tissue destruction, but the derangement of reflex function may be sufficient to cause the most perplexing reactions. The slightest infringement of sensory fibres, which make up the afferent cord, may often lead to an inco-ordination which is incurable, and such an ataxia we recognize as a disease which we have learned to fear. In like manner, as we understand the different causes, we shall soon know the interpretation of hysteria. As we observe how it excites and ravishes the healthy cord function, and as we see it dethrone the volition and derange the mental faculty, we may surround it with the safeguard of our professional attention, and thereby we shall confer a blessing on mankind.

Traumatism, as it affects the nervous system, may vary in degree. The slightest jar may cause decided pathological results. In a sense, the wear and tear of daily life is a traumatic irritation to the nerves; it may not be radical at first, but the breakneck speed of the present century tells its tale in later years. The constant hammering upon the delicate sensory nerves causes a reactionary innervation which the brain cannot long withstand. Every sensation which irritates the corresponding sensory ganglia causes a motor reflex which is cumulative in its exhaustive effects. Unless the greatest forethought is exercised, we shall continue to injure our nerves from day to day, and the condition of hysterical increase will be a constant menace to our physical safety.

HOW SHALL WE DISPOSE OF OUR DEAD?

BY WILLIAM C. POWELL, M.D., BRYN MAWR, PA.

(Read before the Homœopathic Medical Society of the Twenty-third Ward of Philadelphia, November Meeting, 1896.)

IN presenting this paper I was actuated by a desire to get the views of this Society on the question, How shall we dispose of our dead? It is one which has agitated the mind of man from the creation to the present. There are few subjects which present such varied and important thoughts for consideration. Human life presents to Christian people two elements or natures—a human, material or mortal, and a divine, spiritual or immortal. Death, the termination forever of earthly activity, separates these two natures—the spiritual returning to God and divine means for its disposal, the human remaining a foreign substance for the living to dispose of according to their peculiar customs. In considering this question I shall confine myself to the two modes in vogue at present, inhumation and cremation. For convenience, I desire to call your attention to the subject under five heads: sanitary, economical, medico-legal, æsthetic and theological. The medical profession particularly should take an active, intelligent and practical interest in the first, or sanitary, solution. That poisonous substances can be transmitted through the ground for a considerable distance is shown by an experiment of Sir Spencer

Wells: "A salt of lithium was spread upon the ground at a distance of 500 feet from a well, the water of which was free from that metal. Repeated examinations were made, and at the end of 18 days lithium was detected in the water, showing the salt must have penetrated the soil and found its way into the well." The advocates of cremation claim that efforts to arrest infectious as well as contagious diseases, such as scarlet fever, diphtheria, etc., are frustrated by the burial of infected bodies; for, while the microbes themselves die, their spores or seeds have great vitality, and burial does not destroy the contagion that lurks within them, and there is constant risk of contamination of both air and water. They say we shun the presence of those afflicted with infectious diseases while living, and yet no sooner are they removed by death than we are content to lay them in the ground, that they may slowly dissipate their terribly infectious gases through the soil, and, saturating that, may thereby recharge the rains of heaven, as they filter through it, and thus reproduce all their virulence in the systems of the living. In proof of this, Dr. Frierie, of Rio Janeiro, while investigating an epidemic of yellow fever a few years ago, found the soil of the cemetery wherein the victims of the fever were buried, alive with germs exactly similar to those found in the blood of the recent victims. Such an eminent authority as Sir Henry Thompson says: "Give me the dead body to resolve into carbonic acid, water and ammonia as rapidly as possible, and I have no fear of disease spreading in neighborhoods where it is prevailing." Cemeteries, they assert, are a menace to public health, and often are so situated that the leechings from the accumulated corpses must of necessity be filtered into the wells from which many families obtain their drinking-water. The result is not only disagreeable to contemplate but is detrimental to health, producing fever and germ-diseases. If this be true, by earth-burial we are unavailing in our attempts to arrest disease. But let us see what the advocates of earth-burial claim. Such scientists as Pettenkofer, Hofman and Leluri state that, from a bacteriological standpoint, there is no evidence that a buried body is a source of special danger to the living, and the fear that any water-supply would be contaminated because of drainage from dead bodies is unreasonable—that no damage can come of exhalation.

tion from a body six feet below the earth. Personally, as far as my limited experience goes, I have been unable to trace sickness due to close proximity to cemeteries, and have not found families living near them more sickly than those at a distance. Furthermore, I feel the dangers are much exaggerated; and I believe, if the process of embalming by injecting the embalming fluid into the circulation soon after death was practiced, it would so disinfect the body as to render it harmless. A local undertaker, Mr. J. S. Pearce, one of the foremost in his profession, has conducted a very interesting and instructive experiment upon an unclaimed male body. Last March the body was embalmed. Eight months have passed and it is still in a perfect state of preservation, although resting on a swinging-shelf in the third-story of a wareroom, with nothing but a muslin cover over it, subject to the excessive heat of summer, and yet no odor nor evidence of decomposition. On the contrary, a mummification has taken place in the nose, fingers and toes. This preservation explodes a statute law which claims that in three months a body, if buried or exposed to atmospheric conditions, would be so distended with gases of decomposition as to be unrecognizable. The only odor to this body is that of human oil; the cover surrounding the body has become greasy from contact with it. For dissecting purposes this experiment should be of great advantage, not only disinfecting the body, but preserving it indefinitely. This subject, five months after death, had a portion of thigh dissected by one of our local physicians, and even now the flap can be removed and the muscles will be found pliable, arteries and veins in good order. The abdominal cavity was opened, and the internal organs found in a perfect state of preservation. The disgusting practice of pickling the bodies for dissection should be done away with. As a proof that water is not contaminated by burial in West Laurel Hill, within a few feet of hundreds of dead bodies is a well which furnishes as pure drinking-water as can be found in any section of the country. This has been chemically tested by experts, and not a trace of impurity found.

Now as to the economic aspect. The expense of interment varies greatly in different localities, and is much or little, according to the financial standing of the deceased. The average expense in the middle classes for each interment is from \$25 to \$100, including in this estimate coffin, undertaker's fee and lot.

The cost of incineration at Philadelphia crematories for members is \$75; non-members, \$90. This includes a handsome coffin, hearse, two carriages, services of undertaker, incineration of body, a receptacle for the ashes and space in cemetery for urn-burial. The medico-legal question presents a great disadvantage to incineration. In cases of doubtful identity it is sometimes possible to settle the disputed point by inspection of the body after burial. Again, in cases where poisoning or criminal violence is suspected, the result of the trial and fate of the accused may sometimes depend upon the evidence furnished by a post-mortem or perhaps post-burial examination of the body. The destruction by cremation of all demonstrable evidence of the cause of death—that is, as can only be obtained by the exhumation of the body—is a danger to society, and should be made the subject of careful investigation. The law at present seems inadequate to settle the difficulty. The only requirements of the incinerating company are that a permit must come from the Board of Health, and all applications for the incineration of bodies must be accompanied by the customary certificate of death.

The æsthetic side offers, probably, the most potent objection to cremation in the minds of many. There is something peculiarly shocking to most minds in the thought of burning the bodies of friends. That a human form, but recently full of life and vigor, should be burned to ashes seems little less than sacrilege, and when the form is that of one whom they have loved and cherished in life, cared for in sickness, and watched over in the hour of death, the idea becomes repulsive. On the other hand, to minds differently constituted this method, whereby the remains of loved ones are reduced to their elements in a few hours, seems infinitely preferable. They have a horror of placing their loved ones in the ground to moulder and decay, to be eaten by worms, and perchance to have the grave desecrated. Then, too, the horror some have of being buried alive would be obviated. So, too, if embalming, in connection with earth-burial, be practiced, there can be no possible return of life in the grave. As some may not have familiarized themselves with the process of incineration, I have condensed the following from the *Columbarium*, a journal devoted to the interests of cremation: "Upon arriving at the crematorium, the coffin, with the body, is placed upon a catafalque and taken to

the chapel, where services can be held. After this it descends, by means of an elevator, to the crematory, is placed upon a cradle, covered with a cloth saturated in alum-water, and noiselessly rolled into the retort or incineration-chamber. This is built of fire-clay and heated to about 2600° Fahrenheit. No fire comes in contact with the body, and no flame touches the flesh or bones at any stage of the process. In about three hours the coffin is reduced to charcoal and the body to pearly-white ashes. The charcoal is removed and the ashes placed in a temporary receptacle until final disposition is determined by the relatives of the deceased."

As to the last, or theological, standpoint: Between burning and burial there is no difference as to the final result; the inevitable change is wrought in the one case quickly, in the other slowly; in one by the action of clean flame, in the other by the action of the earth. When the soul leaves the body it leaves it forever. The resurrection body is not the physical, natural body, but the spiritual body. St. Paul tells us the relation of this present body to that which shall be hereafter is like the relation of the seed to the flower or the grain to the stalk and fruit. The notion that our future state depends in any way upon the disposition of our dead body has no place in the Christian religion. Take, for instance, a hero rushing into a burning house to save the life of another. The ashes of his body mingle with the ashes of the ruins. Does anyone suppose his soul burned with his body? One must have a strange idea of God to believe that. If such be true, what shall be said of the holy men and women who have died at martyrs' stakes? Both sides of this subject I have tried to place before you in a fair and candid spirit, and trust it may bring forth a good discussion. There are a few customs, however, which I should like to criticize—the ostentatious and elaborate obsequies, the showy mourning, the glowing and often grossly excessive tributes to the deceased, the artificial pomp and parade of sepulchral display which fashion or custom continues to dictate; but as my paper is already long, I shall not dilate further, but will only state that there is an encouraging sign and evidence of growing intelligence, to read in our newspapers, "No flowers" and "Interment private." In the presence of such solemnity as death the utmost simplicity is most becoming.

EDITORIAL.

WM. H. BIGLER, A.M., M.D.

WM. W. VAN BAUN, M.D.

MEDICAL CLIMATOLOGY.

CLIMATOLOGY is a science of comparatively recent origin. From time immemorial there have been "weather-wise" persons, but it has been only within late years that there has been any attempt to gather and collate observations scientifically made and systematically recorded so as to build up a science of climatology. Physical geography in its broadest application has received much attention, and has come to be recognized, with its climatological adjuncts, as a useful handmaid to the philosophy of history. The general characteristics of nations have been traced directly to the physical peculiarities and climate of their respective countries, and their histories have been seen to flow, almost of necessity, from these characteristics. But the study of climatic and telluric influences upon the origin, development, and modification of disease has been much neglected, and yet it surely opens up a very wide and interesting field for investigation.

The general fact of man's moods being subject, in a great measure, to the varying kinds of weather and to the variations in barometrical pressure has long been known and universally recognized. A comparison of statistics has shown, *e.g.*, that the greater or less prevalence of crime is largely influenced by the stand of the barometer. The difference between the grumbling impatience of the self-restrained man during the prevalence of an east wind, and the murderous propensities of the lawless ruffian when the barometer is low, is one of degree only.

It is true, much of this influence seems to be referable solely to the emotional part of man's nature, and yet all investigations in psychology and physiology tend to show that this, in its turn, depends upon the physical condition of the organ (the nervous system) through which alone any manifestation can be made. Hence emotional disturbances can *à priori* be ascribed

to molecular changes which have taken place or which are taking place in the body, and of which these disturbances are sometimes the first and only symptoms. A disturbance of function without a disturbance of the organ by which such function is performed is incomprehensible.

But it does not need this argument to show that climate has a decided influence upon the physical constitution of man, and upon the origin and development of abnormal conditions or disease. To say nothing of the twinges of the aggravating pedal callosity at the approach of bad weather, and of the reliability of the "weather indications" furnished by a case of domesticated rheumatism, the large world of invalids have learned in the school of personal experience how profoundly their ailments are affected by changes in the weather about them, or by changes in climate gained by travel. Yet these bits of information have been picked up by chance as it were, and have not been interpreted and classified by physicians as should have been done. There is still but little scientific knowledge upon this point even amongst physicians. The graves of the myriads of unfortunates who have been sent hopefully from home to die among strangers in a climate which has only served to hasten the bitter end, are an unwelcome but suggestive monument to the culpable ignorance of their advisers. How few are the physicians capable of prescribing a climate for their patients with anything like the precision with which they prescribe drugs. Even if they have a general acquaintance with the characteristics of the various health-resorts, there is still wanting a clear knowledge of their effects upon the various forms and stages of disease. A climate, different from the one at home, is in the eyes of many supposed, under all circumstances, to be able to act as a panacea.

The difficulties which surround the study of this subject are many, and many of the methods pursued are faulty. The three main points to be considered in regard to any locality with reference to the effect upon disease are altitude, humidity and equability, and the greatest of these is equability.

Studies of these have of course often been made, but too frequently without sufficient clinical data to prove of much use. An effort was made a long time ago by one of our homœopathic physicians to record so-called "weather provings," and

had it been taken up by the profession at large much good might have resulted. The observations of a single individual would furnish but a meager basis for any trustworthy generalizations. The effort made lately by a branch of our national weather bureau in the same direction deserves, therefore, the heartiest co-operation on the part of the medical profession throughout the country. Taken in connection with the more complete vital statistics the meteorological records will in a few years afford valuable material for scientific deductions.

Even with these facilities the liability to mistake is apparent, for many of the climatic changes do not manifest their full effects at once, and there is danger of attributing an effect to a wrong cause. For example, the recorded mortality among infants during the summer is not exactly coincident with a period of intense heat which is its direct cause, but may correspond to a fall in temperature which has nothing to do with the death-rate except perhaps to lessen it.

We are then thrown back upon a system of averages, than which there is no greater delusion and snare, especially when, as in this case, we seek to "average up" the lawless changes of the temperature within the artificial boundaries of our calendar months. A scorching, sizzling month does not become any less dangerous or more attractive, even in the recollection, from the fact that the intercallation of a few days of subnormal temperature has reduced the average within moderate limits. The same holds good in regard to the reports of the prevailing climate of a locality as so often presented. The average temperature, the average degree of humidity, the average number of hours of sunshine during a month are given with a laudable degree of accuracy, and yet the true character of the climatic conditions of the place may be totally misrepresented.

The only exact method, we think, would be to record and classify the meteorological observations according to periods marked by similar conditions, irrespective of civil divisions of time; we would then have a better conception of the character and frequency of the changes, and therewith of the real climate, and be better able to trace its effects. The whole subject is an exceedingly interesting and important one and might well form a part of the extended curriculum of our colleges, or become an object of post-graduate study.

THE SCRANTON MEETING OF THE STATE SOCIETY.

AFTER years of rotation, the Homœopathic Medical Society of the State of Pennsylvania has broken its old habit of alternating its meetings between Philadelphia and Pittsburg and decided to try Scranton as the place of assembly for 1897. The physicians of this section of the State are many and the moment they received an intimation of this restiveness they cordially invited the Society to meet at Scranton, the metropolis of the northeast. The invitation was accepted and the physicians of Scranton and vicinity have been actively at work making elaborate preparations to entertain a large delegation of visiting physicians, and as it is their first attempt at entertaining the State Society, they will be grievously disappointed if the attendance is not large and enthusiastic. They expect Philadelphia with her four hundred and eighty homœopathic physicians to send a delegation of at least fifty, and other cities in proportion. Chester will send seven.

An unusually large number of New York physicians have accepted invitations to attend the meeting and the New York State Homœopathic Medical Society, on discovering that the Pennsylvania Society would meet at Scranton on Tuesday, Wednesday and Thursday, September 21st, 22d and 23d, immediately changed the date of its semi-annual meeting at Owego from September 21st and 22d to that of October 5th and 6th, so that the two meetings would not conflict—a courtesy that Pennsylvania appreciates, as many members of these societies want to attend both meetings.

The natural attractions of this part of Pennsylvania are phenomenally lavish. It is America's Switzerland, and the mountain scenery and air combined with the advantages of a great city, all tend to make Scranton a most desirable place of meeting, and the promise of success is so sure we feel certain that the Pennsylvania Society will drop alternation in the future and will rotate regularly between Philadelphia, Pittsburg, and Scranton.

Dr. Ware and his associates have made ample provision for the accommodation and entertainment of the State Society, and Dr. Gramm, the secretary, has been indefatigable in his efforts to provide a well-considered programme for the business and scientific sessions of the Society. All that is necessary for complete success is the attendance of each member of the Society with one new member for each.

GLEANINGS.

CARBOLIC ACID GANGRENE.—Dr. Dobrucki (Poland) has observed two cases of gangrene due to application of 2-3 per cent. solutions of carbolic acid to the fingers.

In the first case, after extraction of the tip of a needle from the second phalanx of the index-finger, a compress wet with a 2 per cent. solution of the antiseptic caused a blackish eschar to form after two days, which, after falling off, left a cicatrix adherent to the bone.

In the second one, after opening a felon of the middle finger a 3 per cent. solution of the acid was applied for several weeks, with resulting total gangrene of the entire finger.—*Przegląd Chirurgiczny*. Tom. iii, Zeszyt 3. 1897. Frankenburg—*Die Carbolgangrenen*, Inaugural Dissertation—states that carbolic acid brings about stasis and thrombosis of the bloodvessels which in certain idiosyncratic states may go on even to mummification. Therefore, he concludes that the application of compresses, wet with carbolic acid, to the extremities is especially liable to produce gangrene.

DIETETIC TREATMENT OF CANCER OF THE STOMACH.—Dr. Albert Robin reproaches practitioners for abandoning patients with cancer of the stomach to their fate after having made a mere diagnosis. The milk diet which is usually prescribed is generally not well tolerated, for the digestion of proteids is usually poor, in these cases, while that of the starchy foods is generally good. If the pylorus is patent and the intestines functionate well there is no contra-indication to the use of meats. One may advise lean fish, meat-jelly without sauce, bouillon, and later, for a time, meat-powder and meat peptones.

As to vegetables, beans and peas may be given in purées, yet, on the contrary, but little green vegetables; boiled fruits and unleavened bread are allowable. One should avoid fresh bread, cheese, and all forms of pork. The patient should drink but little; use milk only at short intervals to stimulate the appetite, when there is hæmatemesis or incessant vomiting. Only three meals a day. Fresh butter in good quantities is well-borne.—*Norsk Magazin for Lægeridenskaben*, No. 4, 1897.

PYELONEPHRITIS IN CHILDREN.—Dr. Baginsky (Berlin) recently reported before the Society of Internal Medicine of Berlin four cases of pyelonephritis in children, with periodic appearance of albumin, pus and casts in the urine. In all four the course was benign under treatment by milk diet and alkaline waters, though this is not always the case. During the summer months such a pyelonephritis may appear in a much more serious form as a complication of diarrhœa. The child is seized with repeated attacks of bloody and mucous diarrhœa, which finally ends fatally. The necropsy reveals numerous small abscesses and hæmorrhagic foci. The pathological process seems to begin in the pelvis of the kidney and to spread out over into the collecting tubules. These

severe forms are dependent on intestinal diseases, and the same holds good of those commencing with diarrhoea or obstinate constipation. No one micro-organism is constantly found present. In the discussion Finkelstein said that he had noticed pyelonephritis frequently to be associated with intestinal diseases. In boys with this affection he has not found the bladder to be involved. Posner dwelt on infection by the bacterium coli taking place from the intestine through the kidney.—*Hôpitalstidende*, No. 21, 1897.

FEVER OF OVEREXERTION IN A BICYCLIST.—Dr. Mathieu (Paris), in a recent communication before the Société des Hôpitaux de Paris, related the case of a young man of twenty-four, who, after having "pedaled" for twenty-nine consecutive hours at a bicycle race, was seized with dyspnoea, expectoration of blood and fever. The temperature for eight days varied between 39–40° (Cent.), when it fell suddenly as in pneumonia, though no sign of this disease was to be detected. During both the febrile as well as the apyretic stage there was a notable quantity of albumin in the urine—1.5 per litre—while during convalescence, whenever he attempted to take a short ride on his bicycle the albuminuria increased considerably. The reporter cited this as a very typical case of auto-intoxication from overexertion.

In the discussion Dr. Rendu related an observation concerning a bicyclist who, after a "run" from Brussels to Paris, was taken with diffuse myositis, generalized purpura and profuse epistaxis, where examination of the blood revealed a very pronounced leucocythæmia. Whether this blood-state pre-existed latently and was exaggerated by the overexertion or was due to the excessive exertion he leaves undecided.

Dr. Faisans recorded the case of a physician who "covered" fifty kms. on a bicycle without any previous riding, and afterwards presented a series of typhoid symptoms for twenty days, then phlebitis of the calf of one leg and symptoms of myocarditis. A diagnosis of auto-intoxication with superadded infectious phenomena was made.—*La Semaine Médicale*, No. 29, 1897. (It is said that Prof. Peter, of Paris, once made a diagnosis of typhoid fever in a young man who with a light pocket-book and a hungry stomach had walked a long distance to Paris, there to fall ill and to be taken to a hospital with typhoid-like symptoms. The old professor knew nothing of his overexertion.)

FRANK H. PRITCHARD, M.D.

PRIAPISM.—According to Taylor, of New York, this morbidly-prolonged erection may be divided into

1. Priapism in infants and children from reflex causes.
2. In adults symptomatic of stone in the bladder or urethra, of stricture of the urethra, or retention.
3. Symptomatic of gonorrhœa.
4. Due to cantharides.
5. Essential priapism.

Passing over the first four, the fifth, essential priapism, may be subdivided into four varieties, as follows:

1. From injury to brain or spinal cord.
2. Symptomatic of cerebral or descending cord lesion.
3. Occurring after alcoholic and sexual excesses.
4. Cases occurring in persons of general good health, with no apparent or adequate cause, but now by some attributed to leukaemia.

In the cases resulting from spinal injury the course depends upon the extent and severity of the injury. In some cases recovery occurs and the priapism ceases; in others death occurs without relief from the affliction. The cases of priapism from cerebral and descending spinal disease are rare, and in most of the cases reported the symptom was of long duration. In the cases from alcoholic and sexual excess the mode of onset is variable, in some cases sudden, in others more gradual, but in all the condition is persistent and temporarily obstinate, and in many cases very painful, with swelling and often a nodular condition of the penis. Often there is marked tenderness over the perinæum and at the bulb and spasm of the cremaster muscle. The pain also, as distinct from the tenderness, is often very severe, and there will be difficulty in passing the urine and more or less general systemic depression. Generally not the whole organ is affected. The invasion is usually sudden, and the involution usually slow and gradual, with many relapses. While the ætiology is not yet clearly established, it would seem that in most, if not all, of the cases there has been some injury to some part of the penis itself or marked irritation of the sexual centre or of the *nervi erigentes*, or of the sympathetic. In regard to the class of cases stated as possibly due to leukaemia, he was not yet fully convinced of the certainty of the relation between the two conditions, and thought that possibly they might be merely coincident, the priapism being due to some other cause or causes. The prognosis is always somewhat uncertain, and depends upon the cause. In cases due to injury, treatment by incisions will usually hasten recovery. In the spinal cases the prognosis must be very guarded. In the neurasthenic and so-called leukemic cases the priapism is likely to be very persistent and liable to relapse.—*Medical Record*, July 3, 1897.

HYSTERICAL APHONIA.—Sanger Brown, of Chicago, states that hysterical aphonia, while not one of the most common symptoms of hysteria, is one of the most conspicuous when present, and while in a great majority of cases no diagnostic difficulty is met with, yet there are cases that have for years successfully baffled the general practitioner. At least two fairly distinct types are found: First, that in which aphonia is merely an accompaniment of many other pronounced stigmata of hysteria; and, secondly, a pure form, in which the symptom occurs suddenly, with or without exciting cause, continues for a longer or shorter time, and constitutes the sole evidence of hysteria. In the impure type the aphonia may be among the first symptoms to appear, or it may show itself only after other symptoms have been present for weeks, or even months. It may commence as a transient hoarseness, worse when the other symptoms are worse, or as hoarseness associated with an ordinary cold; finally, complete or almost complete aphonia supervenes. In the pure type the aphonia usually develops suddenly; for instance, the patient comes down to breakfast in his usual health and spirits, and finds, much to his surprise, that he cannot raise his voice above a whisper, or very rarely he may be entirely mute, or the attack may develop suddenly as the result of a severe emotional shock. The various successful forms of treatment unquestionably owe their efficacy to the suggestion which they accompany. Hypnotism has been successful in a number of instances, but not more so than the various forms of electricity—more particularly faradism—applied to the larynx, sometimes by a peculiarly-shaped electrode applied internally, and at other times simply applied externally. The method of Oliver

has given excellent results, the latter's plan being to pinch the posterior part of the arytenoid cartilages between the thumb and index-finger, and thus produce an approximation of the vocal cords, at the same time vigorously shaking the larynx and calling upon the patient to make an attempt to phonate, assuring him positively of his ability to do so. At first only vowel sounds are attempted, and gradually the pressure and shaking are diminished until the patient is able to phonate without assistance. A third very ingenious and successful method consists in first getting the patient to cough, then having him cough and at the same time pronounce the different vowel-sounds, thus convincing him of his ability to phonate. It is probable that in all pure cases any of these methods, if applied with suitable suggestion on the part of the operator, would be successful; but in the cases in which the aphonia is associated with other marked symptoms of hysteria it is doubtful if complete success will be obtained until the other symptoms have in a great measure subsided, and to this end it is often necessary to improve the patient's general health.—*Medical Record*, July 17, 1897.

THE ORGANISM OF SYPHILIS.—Van Niessen (*Wien. Med. Woch.*, Nos. 36–40, 1896) replies at some length to the critics of his book on the syphilis bacillus, and adduces further evidence in support of his views. His later work has been carried on mainly in two directions: first, the comparison of micro-organisms stained in syphilitic tissues with those observed in pure cultures; and secondly, the cultivation of the specific bacillus from the infected tissues. He has especially investigated syphilitic lesions of the brain and spinal cord. Sections of these were stained by Gram's method or cultivations made by imbedding little pieces in gelatine, so that one surface was left exposed to the light. On this numerous colonies soon developed, which were employed in further researches. The author claims to have infected eight rabbits in various ways, so as to produce secondary syphilitic lesions, but he has not yet succeeded in inducing the primary lesion upon the genitals. Owing to the great difficulty of excluding other causes, such as infection by tubercle and coccidia, his researches in these directions are not yet ripe for publication. He has, however, been able to demonstrate the "syphilococcus" in an excised primary sore of the prepuce, and also to cultivate it in gelatine mixed with blood taken from the wound produced by the excision. The cocci were present throughout the tissues removed, but were particularly abundant, often forming emboli, in the deeper layers. Van Niessen is therefore convinced of the diagnostic value of the organism in primary affections; and although the results with later syphilitic lesions of the central nervous system are not as yet equally consistent, he is convinced that further improvements in investigation will render them equally available for diagnosis. His inoculation experiments are very striking. A pure culture of the organism, from the primary sore above mentioned, on veal broth, was injected two months later into three rabbits, a goat, a guinea-pig, and a pigeon. In several of the animals typical hard sores developed, which in the pigeon took on a phagedenic course, while in the goat and one of the rabbits gummata developed. The syphilis thus produced in animals was characterized by slow and protracted symptoms, by a marked tendency to cell proliferation in the form of a tumor with necrotic centres, and by involvement of the capillaries and lymphatics. The author claims to have proved that his syphilococcus, when injected in pure culture, will produce both the primary affection and gummatus tumors.—*British Medical Journal*.

F. MORTIMER LAWRENCE, M.D.

THE PLACE OF THE MURPHY BUTTON IN GASTRO-ENTEROSTOMY.—Meyer (*Annals of Surgery*) shows that with the help of Murphy's button we can materially widen the indications for gastro-enterostomy for malignant disease of the stomach.

The last collective investigation which he could find in American literature was published by Murphy in *The Medical News*, February, 1895. He records eighteen cases of gastro-enterostomy, with twelve recoveries and six deaths. In discussing this operation he says: "It is my opinion (and my practice is in accordance with it) that patients who are not in a condition to withstand a pylorectomy should not be operated upon." "Gastro-enterostomy for malignant disease should never be performed on an extremely cachectic patient."

Meyer does not agree with Murphy on this point. He thinks we have not the right to deny help to a patient in this deplorable condition, if there is still the slightest hope for a successful operation. If we define the work of the medical man as that of trying to save life and to ameliorate suffering, we ought to operate for obstructing pyloric cancer, even on "extremely cachectic patients," with the same propriety as we do gastrostomy for obstructing carcinoma of the œsophagus in a similar condition. There is in practice comparatively little difference whether a patient vomits soon after having swallowed, or a few hours after his having partaken of food. In both instances the patient starves to death.

Meyer, after stating that McGraw shares his opinion, quotes from the latter: "I have briefly described these two cases to call the attention of the profession once more to the relief which surgery can give to these hopeless cases which it can rarely cure. It is a mistake for physicians to feel and say that it is not worth while to subject a patient to an operation which can only be of temporary benefit. Many of these patients live one, two, or even three years after a gastro-enterostomy. Most of them recover from the operation. If successful, there follows a long interval of relief and comfort, and death when it comes, comes in a less terrible form."

Just in these extremely cachectic patients we feel almost the necessity to shorten the time of operation as much as possible, and reduce the handling of the intestines to a minimum, the two factors that combine with the effects of the general narcosis to produce in these almost bloodless operations so-called "shock." General narcosis should be avoided as much as possible. This can be accomplished with Schleich's infiltration anæsthesia. Czerny has done a gastro-enterostomy with the button under cocaine anæsthesia.

That Murphy's button enables us to handle the bowels as little as possible in gastro-enterostomy, that it often helps to reduce the time of the operation, and therewith that of the general narcosis, no unbiased man will deny.

The advantages of Murphy's button in carrying out gastro-enterostomy are striking and manifold:

1. The anastomosis is made very rapidly. Six to eight minutes is the time generally used for this purpose. There is no surgeon living who can work equally quick with the suture. That the saving of time is of very great importance in gastro-enterostomy for malignant disease in extremely cachectic patients, that here really every minute counts, is acknowledged. It is true that the actual time required for properly finishing the anastomosis with the button has been somewhat increased lately, since it has been found advisable in gastro-enterostomy to add a continuous Lembert suture, or a number of in-

interrupted Lembert stitches, around the seat of approximation. In gastro-enterostomy Meyer deems this suture very essential, and would strongly advise to add it in every case of this operation. Everyone of the authors mentioned by Meyer favors this additional suture as an important safeguard. Of thirty-nine patients mentioned in whom additional sutures were put in after the insertion of the button, twenty-nine recovered and ten died. Of course, the additional suture as such did not save the patient's life. But in none of the ten cases that succumbed was the cause of death perforation at the seat of approximation with consecutive septic peritonitis.

2. The patient can be fed by mouth as soon as he has recovered from the anæsthetic. Perhaps the same could be done when the suture has been used, yet so far no surgeon ever dared to do so.

3. The anastomosis does not contract.

It has been demonstrated by a great number of autopsies that the opening does contract, sometimes materially, if the approximation has been made with the suture or its substitutes formerly devised. This contraction is the necessary consequence of physiological tissue-repair. We therefore make, in using the suture, an anastomosis of at least three to four inches in length. The button, however, cuts out by necrosis that portion of the tissue which is otherwise held in permanent approximation by the suture or its former substitutes. This hole is as large as the diameter of the button; it is sharp and round, as if punched with the forceps.

4. On account of the small space needed in order to insert the button gastro-enterostomy can still be carried out where the operation with the suture is a technical impossibility.

There seems to be only one drawback to the use of the button, viz., it often drops into the stomach. For this reason Meyer has advised always to use von Hacker's operation when feasible. But also in this position the button does not always follow the current of the gastric contents. In the three cases of posterior gastro-enterostomy reported by Frey the button was voided. In Czerny's five cases, all done according to von Hacker, the button passed four times between the eighth and eighteenth day. Once it had not been found after three and one-half weeks. The patient, however, had not complained at any moment, was perfectly well when he left the hospital. There is no reason to assume that the button had slipped into the stomach.

In twelve patients mentioned in Meyer's table the button passed twice per anum after the anterior operation and twice after the posterior one. Four times it was found in the stomach, viz., three times after the anterior operation and once after the posterior one. In four patients the discharge of the button had not been noticed during the time of observation. The analysis of this table seems to prove that the posterior attachment of the intestinal coil greatly favors the passage of the button per anum.

The interesting point in this accident (retention of the button in the stomach) observed by all operators is that the presence of the button within the stomach has never caused any trouble. The mucous lining of the stomach has not been found affected at the autopsy in a single instance.

Still Meyer considers this point a sufficient reason to do the operation for benign stricture of the pylorus with the suture. Although we know that the button does not do harm for months after its entrance into the stomach, yet we cannot say what it might do there after many years. In these patients

the element of saving time during the operation is generally of less importance. We also find sufficient room to make a four-inch anastomosis.

Summing up, Meyer says :

1. For gastro-enterostomy Murphy's anastomosis button is the best artificial contrivance up to date. It hastens and simplifies the operation. It enables the patient to be fed through the mouth right after the operation. The anastomosis is still feasible with its help where proper suturing is impossible. We can thus still do the operation successfully with the button where otherwise we should have to abandon the same when only using needle and thread. The anastomosis made with it does not contract.

2. In using the button, posterior gastro-enterostomy (von Hacker's operation) is preferable to the anterior one (Woelfler's), because it favors the progress of the button towards the anus. In both methods, however, the button can drop into the stomach.

3. The presence of the button within the stomach has so far never done actual harm. This accident, therefore, is not to be considered a drawback to the use of the button.

4. In all cases where reduction of time of the operation is of importance the use of the button is indicated and not the suture.

5. There is no reason borne out by practical experience which should prevent us from making use of the advantages of the button in every case of gastro-enterostomy for malignant disease.

6. If the button be used, great emaciation of the patient is no more a contraindication to this operation than it is to gastrostomy in cancer of the œsophagus.

7. On account of the possible entrance of the button into the stomach, gastro-enterostomy in cases of benign stricture of the pylorus should be done with the help of the suture.

HERBERT L. NORTHROP, M.D.

THE OPERATIVE TREATMENT OF MYOMA OF THE UTERUS BY TOTAL VAGINAL EXTIRPATION (LEOPOLD).—The subcutaneous injections of physiological salt solutions have been freely used with great benefit in preparing the patient for operation. Some patients have been given daily for eight days or longer two hundred to three hundred grains of the solution. The general conditions, the pulse, and especially the appetite, have been materially improved, the facial expression changed entirely, and their good recovery after very severe operations must be ascribed to this remedy. Nothing helps the organism so quickly—not even the best of nourishment, baths, rest, or any medication—as the introduction of this easily-absorbed solution, which is taken up at once by the circulation. It must be used, however, when the patient is strong enough to absorb it, and not wait till the pulse is small and feeble and life approaching dissolution.

The leading idea of the operation in general is to make the enlarged uterus collapse after enucleation of the myoma, apply ligatures laterally up to the level of both tubes, then remove the uterus, and the abdominal cavity is readily closed.

The vagina is thoroughly washed with soap, rinsed with sterilized water, wiped with sublimate gauze, and tamponed with dry gauze.

The left side of the vagina and perinaeum is incised to obtain more room,

an anterior and posterior speculum introduced, and the anterior lip of the cervix seized with the Museux forceps. The cavity of the uterus is thoroughly washed out and packed with long strips of sterilized gauze. The external os is now completely closed with two Museux forceps, the lower border of the bladder separated from the vaginal portion, and the incision continued in a broad curve posteriorly toward the vaginal vault. The vaginal walls and the underlying connective tissue are pushed up, and the operator endeavors to reach a portion of the tumor before or behind with the index finger. If the posterior crescent-shaped fold does not push forward into the vaginal vault, the cul-de-sac of Douglas is more or less adherent.

If the cul-de-sac of Douglas can be opened easily, a ligature is passed through the posterior fold of the peritonæum to draw it down. The left broad ligament is then ligated under the guidance of the left forefinger, if the size of the uterus permits it, and whenever possible the ligature should be placed over the uterine artery. This is repeated on the opposite side. Each ligature placed higher on the broad ligament is made to include the one beneath, so that three successive ligatures are tied one behind the other. In this way the upper ligature closes also the one beneath, and is an extra preventive against secondary hæmorrhage. If the uterine artery cannot be reached by the blunt aneurysm needle on account of larger or smaller myomas in the neck of the uterus, the capsule of the tumor is split open and the myoma enucleated, piecemeal or entire, by blunt dissection and gradual traction on the growth. It is better to remove the growth piecemeal and by gradual traction, as there is less hæmorrhage when the uterine arteries are not tied. It may also happen that in the further ligation of the broad ligaments one of the previous ligatures may slip off, and cause considerable trouble to find it in the retracted tissue. All this can be avoided if one piece after another of the tumor is enucleated, as the lower portion of the uterus contracts or collapses together, and the ligatures can be applied more easily then to the broad ligaments. In case the bloodvessels are ligated in or about the level of the internal os, it must be remembered that there is occasionally a large branch of the uterine artery, according to the size and growth of the tumor, extending up to the tubes.

More pieces of the tumor can now be enucleated with Museux's forceps. No piece of the growth should be cut away until the next higher portion of the capsule of the tumor is brought down and completely exposed. If this is not done, bleeding places may slip back into the abdominal cavity, and the entire field of operation be covered with clotted blood, the source of which could not be seen. If the above rule is followed the operation is almost bloodless, and uncomplicated by a bad pulse, fainting or asphyxia.

As soon as the last portion of the myoma has been removed the fundus uteri is brought down into the vagina and the remainder of the broad ligament ligated. An additional ligature should be placed on the vessels of the tube and ovary as an additional precaution against hæmorrhage.

If the tissues are thickened by an old parametritis, it is important to place a number of single ligatures about small portions of tissue rather than one ligature, and then place the single ligature about them all. The intestines and omentum sometimes press down in the way, but can be kept back by a roll of sterile gauze pushed up behind the uterus before the latter is removed.

After the removal of the uterus both sides of the field of operation are ex-

posed, and the stumps carefully inspected for any bleeding which should not be present. Slight hæmorrhage from the vaginal walls, more especially the posterior, is controlled by ligating with a fine needle. The stumps are sewn with strong silk sutures, fastened in the angles of the wound, and both serous folds are united, anterior and posterior, by several fine silk threads. The field of operation is carefully dried; and now, but not before, the ends of the ligatures can be cut off. The operator assures himself that there is no bleeding, packs sterile gauze about the stumps, carefully sews up the vaginal incision, and sends the patient back to bed.

If the pulse becomes weak in the next few hours, subcutaneous injections of salt solution are employed.

We have yet to consider those cases in which the cul-de-sac of Douglas is adherent from previous perimetritis, and the broad ligament of one or both sides thickened, and both adnexa developed into masses of chronic inflammation. If the cul-de-sac of Douglas can be nowhere reached and opened, either in the middle or at the side, after dissecting up the vaginal walls from behind, the cervix is carefully drawn to one side, to put the parametric tissue on the stretch. The index finger now feels for the lowest band of the parametrium, presses it forward, and a ligature is placed over it to include but little tissue. It is then divided close to the uterus. It has always been possible, in this manner, to progress upwards close to the angles of the uterus, and often to ligate one or more of the larger branches of the uterine artery. When these stumps are separated from the walls of the uterus, it is often possible to introduce the finger from above and behind into the peritoneal cavity and the cul-de-sac of Douglas, and the broad band on this side can be easily ligated and divided. If the opening at the side cannot be found, the capsule of the tumor is incised where it points forward, and access to the myoma obtained in this way. In many cases the entire muscular wall seems as if it were inflated and thick strings pass over to the various knots of the myoma. It is advisable here to make a long incision on the uterine wall, seize the edges of the wound with two Museux forceps, draw them apart, and remove as much as possible of the uterine muscle. The uterus contracts, becomes smaller from left to right, and with the pressure of an assistant from above the tumor comes down into the field of operation. It has been possible to remove in this manner, in all cases, myomas which completely filled the small pelvis or were as large as the head of a child. Leopold has removed the myomatous uterus seventy-four times by vaginal total extirpation since the 18th of March, 1887, with only two deaths—that is, a mortality of only 2.7 per cent. There has been no death since the seventeenth operation, and there has been a succession of fifty-eight cases without a death. The average duration of the after-treatment has been about three weeks. If the tubes and ovaries are not diseased they are left behind, contrary to the rule for hysterectomy for malignant and suppurative diseases, as the patient will suffer less from climacteric symptoms than if she is totally unsexed.—*Archiv. für Gynäkologie*, Bd. 52, II. 3, 1896.

GEORGE R. SOUTHWICK, M.D.

BELLADONNA is indicated in diseases of the ovaries when there is enlargement of the right ovary, with pressure downwards, as if everything would be forced out of the vulva.

MONTHLY RETROSPECT

OF HOMŒOPATHIC MATERIA MEDICA AND
THERAPEUTICS.

A FEW REMEDIES IN ANGINA PECTORIS.—Dr. Dahlke (Berlin) finds three anatomical points—the right side of the thorax, the sternum and the precordium—to be the important locations to be remembered in selecting a remedy in angina pectoris.

Angina pectoris with subjective sensations in the precordium points to *agaricus*. This remedy suits the incipency of the disease; auscultation reveals nothing of importance, spontaneous attacks never occur. The every-day duties are done without interference; but on any hurrying, especially if associated with emotional excitement, they bring on dyspnoea, a sense of suffocation and anxiety. The nights are passed easily in any position. The weather is without influence, and otherwise the patient is in good condition, except that he is corpulent. (?) Swelling and sensitiveness of the liver are also present, for *agaricus* has for ages been known as a liver remedy.

Kalmia latifolia is said to be indicated where the pains are located in the right side and arm.

Phytolacca is also a remedy which has this right-sided location characteristically, and it has served him well in a series of cases. The *phytolacca* patient is flabby and corpulent, with a rapid and weak pulse and a certain degree of dyspnoea.

Aurum presents a sense of pressure on the sternum as from a heavy weight; peculiarly enough, this sensation appears as soon as the patient attempts to go up stairs, or even to carry out any simpler movement. The *aurum* patient has characteristic aggravation at night, and particularly towards morning; rattling of mucus in the chest and a cough. He is corpulent, often in consequence of abuse of alcohol. These patients have frequently undergone treatment for obesity, with the result that they have lost some fifty pounds in weight, and therewith the energy of their hearts. The pulse is small, weak, imperceptible and sometimes intermittent. There is also congestion of blood to the head and chest. The characteristic mental symptoms may be lacking, though the remedy is still indicated.

Chininum sulphuricum is a drug he frequently prescribes when there are no indications for other drugs. Redness of an ear, a cheek or one eye are possible indications.

Argentum nitricum is to be thought of in angina pectoris, with deep and organic disturbances or spinal diseases as complications. The patient is generally dark and slender, suffers greatly and is tortured by the deepest melancholy. The dyspnoea during the attack is most intense; the pains are very violent, and radiate into other regions with association of a characteristic gastralgia. The specific pain is noticed at the insertion of the sixth and seventh ribs to the left border of the sternum. The writer holds this remedy in high regard. It is pre-eminently a left-sided drug. Vertigo and cerebral migraine assure the selection of the remedy.

Finally, there are varieties of angina pectoris where the pains are situated between the scapulæ. Here the remedies are tabacum, ammon. carb., and, above all, cimicifuga. — *Zeitschrift des Berliner Vereines Homoeopathischer Aerzte*, Bd. xvi., Hfte. iii. and iv., 1897. There is a great deal of carelessness in the employment of the term angina pectoris. It is necessary to distinguish the true from the false angina pectoris, for one is a grave organic disorder and the other a hysterical state observed in neurotic women. The treatment really consists of the relief of the anginal attack and the management of the diathetic state which forms its base.

ACONITE IN FEVER FROM SUPPURATION.—Dr. P. Jousset regards aconite, together with the sulphate of quinine, as the remedies for the treatment of septic fever. When the febrile movement is continuous during the paroxysm, administer aconite; while in the intervals, if the fever be intermittent, quinia sulphate is to be given. The anguish, agitation, prostration even to collapse, the mixture of heat and cold, the redness and heat of the face, at least at the beginning of the disease, the thirst, the elevated temperature, the frequent pulse, and the appearance of one cheek red and the other pale—of evil omen—indicate aconite. It is over fifty years since clinical experience has demonstrated that aconite was efficacious in puerperal fever, yet many times, when the febrile movement was intermittent, did one fail from not employing quinine during the paroxysms. Jousset regards Hughes as in error when he would reject aconite in septic fever.

The mother-tincture should be given in doses of 20 to 40 drops in 200 gms. of water, one teaspoonful every two hours.—*L'Art Medical*, No. 5, 1897.

AMELIORATION BY SECRETIONS.—Dr. Dahlke notices that amelioration by the appearance of a secretion is usually referred to lachesis as an indication, while, in reality, there is a whole series of drugs having this peculiarity. In making a comparative study he finds them to be:

Lachesis.—General amelioration as soon as secretions appear; toothache during menstruation; the less the flow, the greater the pain.

Zincum Metallicum.—Pain in the left ovary, disappearing during the menstrual flow. The dyspnoea is ameliorated as soon as expectoration appears (compare stannum and lachesis); sexual excitement in the male, which is made better by ejaculation (*cf.* stannum).

Moschus.—Drawing pains at the beginning of menstruation, which cease as soon as the flow sets in.

Graphites and Apis.—The pains in the right ovary diminish, and a vulvar secretion makes its appearance.

Senecio.—After menstruation commences the thoracic and vesical symptoms decrease or disappear.

Kreosotum.—During the post-menstrual flow there is a certain pain which becomes decidedly aggravated as soon as it ceases entirely.

Conium, *Ign.*, *Lilium Tigrinum* and *Sulphur*.—Cutting pains in the intestines, followed by leucorrhœa.

Cobalt.—Great pain in the left testicle, which is ameliorated by micturition.

Stannum.—Migraine, which is greatly bettered by vomiting (*cf.* arg. nitr.).

Plumbum.—The menstruation stops at the beginning of the colic.—*Journal Belge D'Homoeopathie*, vol. iv., No. 3, 1897.

FRANK H. PRITCHARD, M.D.

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INTESTINAL ANTISEPSIS IN TYPHOID FEVER.

BY A. K. CRAWFORD, M.D., CHICAGO, ILL.

(Read before the American Institute of Homœopathy, Buffalo, June 25, 1897.)

EVER since the advent of the microbe in the ætiology and pathology of disease, the scientists in the profession have been in search for the chemical destruction of the germ. There is no absolute unity of opinion, as yet, regarding the efficacy of this mode of attacking disease or the success attending its employment; or, rather, while failure is partially admitted, all have not concluded that the method must be abandoned. It is thought that further trials should be made with newer methods or newer materials, which are ever presenting themselves, the outcome of brainy chemists and inventive physicians. The basis upon which this plan of treatment necessarily rests is that the germ is the beginning and the end, the sum total of typhoid fever. The whip that keeps them ever busy trying to compass better results is the calm, unprejudiced conclusion reached that "We have no curative treatment for this disease." The reduction in the mortality from 20 to 8 per cent. is quite justly attributed to better surroundings, better nursing, and less drugging.

I can enumerate only in part the medicaments which have

been used as antiseptics in typhoid fever, but they will suffice to point out one forcible fact, that from their number, variety and diverse chemical nature, it is plain that no centre-shot has been found. Here are a few samples: Naphthol, thymol, salicylate bismuth, mercury, carbonate bismuth, chlorine, hydrochloric acid, turpentine, sulphide carbon, boric acid, benzoic acid, carbolic acid, quinine, hydro-naphthol, arsenic, salol, dermatol, borolyptol, formaldehyde, guaiacol and enteroclysts, of 2 to 4 quarts of hot water, 104° F., in which common salt is dissolved.

Phenacetin, in 45 grains daily, distributed at intervals of four hours, is claimed to neutralize the ill effects of typhoid poison, and aid its excretion by the sweat. The action of beta-naphthol and bismuth subnitrate as intestinal antiseptics, when compared by estimation of the ratio of the normal and aromatic sulphates in the urine, leaves little choice between them as remedies for diminishing the growth of microbe organisms in the intestinal canals of dogs, for which information we are indebted to Surveyer and Vaughn Harley. J. Michell Clarke uses the beta-naphthol. Maximovitch prefers the alpha-naphthol because it is three times less tonic than the beta, yet prevents the development of the typhoid bacillus when used in proportion of one to ten thousand. Liebermeister's choice is for mercury and iodine. W. H. Thompson, of the Roosevelt Hospital, leans upon pepsin as his disinfectant, and says that in consequence of its use the stools are less offensive, the duration of the fever is limited, the abdominal tenderness and meteorism are lessened. There would seem to be a good physiological reason for the use of a digestive ferment, in that any shortening of the digestive process will surely add to the sepsis of the intestinal canal, either in or out of typhoid fever. J. Burney Yeo likes to compound chlorine and quinine. Dujardin-Beaumetz goes at it with solol, salicylate of bismuth and bicarbonate of sodium, of each 150 grains, in thirty powders capsuled, two being given each day. Surgeon Quill gives 3-minim doses of carbolic acid in chloroform water, administered with ice-water. This choice he bases partly upon Werner's experiments, which show the toxic effect of chloroform on enteric bacilli; and, in turn, the latter looks like a synthetical growth from the old recipe of one drachm of chloroform, internally,

for the destruction of a tape-worm. Quill recommends a 2-grain dose of calomel every other night as well. Closely related to carbolic acid is the newer product, guaiacol, which Montgomery used internally and externally in nineteen cases of typhoid fever, all of which recovered. He used douches of warm water or of soap and water, and in case there was high fever he preferred cold water. The guaiacol was given in half to one-and-a-half drop doses, every two hours, sponging the body and applying the guaiacol externally. Benzozol, a combination of benzoic acid and guaiacol, has been used, I believe, more in phthisis than in typhoid fever.

Much has been expected from dermatol, introduced as a substitute for iodoform. It is the subgallate of bismuth oxide, and is credited with possessing fatal action on bacteria upon immediate contact. It is probably the best non-irritating, harmless, local remedy in modern therapeutics. In twelve cases of diarrhœa of typhoid, treated I forget by whom, just now, only good results were reported. Part of the cases had the diarrhœa during the disease, and part of them during convalescence. My own experience with dermatol is entirely of a negative character. Given in capsules per oram and in enemata, I could note no amelioration of the septic symptoms nor of the course of the disease. The reasons why this is possible apply equally to all disinfectants used in this malady, and will be given presently. Even greater hopes were entertained from the use of formaldehyde as an antiseptic. Several preparations on the market like formalin, borolyptol, etc., hold this gas in solution. In the laboratory, even the fumes of this substance are sufficient to destroy the life of pathogenic bacteria. In practice it does not sustain the promise it gave in the experimental field. When introduced into the human economy it undoubtedly undergoes such changes that, by the time it reaches the germs of the disease its action is inert. In my hands it has proven simply worthless as a germicide.

You may look carefully over the most optimistic views presented by the advocates of the use of intestinal antiseptics and you will fail to find anything but relative benefits claimed—nothing more than frequently happens under good hygienic conditions and good nursing, without the addition of chemical antiseptics. In the Hahnemann Hospital, last fall, I had a

series of typhoid cases, all of which terminated on the seventeenth day of the fever, and convalescence followed. There were no typhoid complications nor accidents, neither were there any unusual means applied in the treatment other than the regular homœopathic remedies. How easily I might have been misled, had I happened just at that time to have made an experiment with dermatol, or borolyptol, or formaldehyde, as an intestinal antiseptic.

The formulated beneficial effects from the use of intestinal disinfectants might read as follows :

Reduction of the average duration of fever.

Less offensive stools.

Less abdominal distension.

Early cleansing of the tongue.

Absence of albuminuria.

More rapid convalescence.

Less risk of propagation of the disease.

Diminished tendency to secondary complications.

All of which I modestly claim to have witnessed without the use of an antiseptic administered.

If I may be allowed, I would present the following reasons why the attempt to treat typhoid fever by intestinal antiseptics is irrational and ineffective. If bacteriological processes in the alimentary canal are absolutely necessary for healthy digestion, it is more than likely that, if successful in our attempts to kill the microbe-organisms of specific fevers, we may do more harm than good.

It is likely, too, that the specific microbe-organisms are more resistant to antiseptics than the healthy, consequently the process of digestion may be interrupted entirely and the disease germs left to flourish at will.

Both in tubercle and in typhoid, the bacteria are found imbedded in the walls of the intestine, quite out of reach of any drug which simply passes along the canal.

It is no less a fact that the introduction of drugs sufficient to disinfect the bowel would seriously harm the tissues ; or, briefly put, to kill the microbes usually means to kill the patient.

Neither can I conceive of an antiseptic in the intestinal canal sufficiently penetrating to act upon the myriads of microbes contained in the fecal masses ; so that, to lessen the propagation

of the disease, the only antisepsis worth while must needs be upon the fluids and solids after they have become excreta.

The wail of the foiled scientists is voiced by Surgeon Money Shewan. "Purgatives and antiseptics have been tried for this disease, but without success, and only now at last have we some hope in a serum treatment."

The possibility that the Eberth bacillus in the intestinal tract is not all that there is to typhoid fever is creeping into the minds of not a few good doctors, far and near. Look closely, for instance, at the new definition of typhoid by Chantemesse that "it is a reaction in the organism invaded by Eberth's bacillus." Surgeon Fitzgerald, in battling with this fever among the troops in Rangoon, has concluded to leave the intestinal tract severely alone and to devote his energies to the blood-current and heart. In all of his post-mortems he says he found cardiac thrombosis, and that, consequently, typhoid is purely a disease of the blood. It may be found, some day, that we have been over-zealous in our endeavors to dynamite the microbe. However well the theory may hold, my belief at present is that there is no such thing in the practice of medicine as an intestinal antiseptic in typhoid fever.

HYSTERIA IN THE MALE.

BY A. P. WILLIAMSON, M.D., LL.B., MINNEAPOLIS, MINN.,

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(Read before the Minnesota State Institute of Homœopathy, May 18, 1897).

A LARGE proportion of the human race possess all the necessary elements of hysteria, and only await favoring environment to develop an attack. We find the following to be the essentials: First, the cerebral mass; second, an inherited sensitive nervous organization; and third, some physical cause, usually a reflex. Added to these predisposing conditions there is also required an inducing cause, such as an excitement of the emotions. Here we have arrayed the etiological history of every case of hysteria. The old idea that hysteria was

caused by uterine disturbance was only partly true. The uterus, like the stomach, kidneys, heart, prostate gland and other organs, is liable to be the seat of a disease which reflexly affects distant parts of the body; but it is not the only seat of reflex irritation. It is also true that many cases of hysteria show excitement of the sexual apparatus, which lent additional strength to the ancient belief that the uterus was the offending organ, but we know that such excitement is not confined to the female sex, for it is even more frequently present in male victims, in whom the uterus is presumably absent.

The real cause of the disease is unquestionably in the cerebral convolutions. One writer describes the cause thus: "The cardinal fact in the psychopathy of hysteria is an exaggerated self-consciousness dependent upon undue prominence of feeling, uncontrolled by the intellect. Hysterics are deficient in energy or in an appropriate direction of energy; some become inert and others actively mischievous." Its pathology is absolutely unknown. It is conjectured, however, that the change in cerebral action is due to some derangement of the circulation which produces localized and temporary hyperæmia or ischæmia. This results in excessive action or loss of control in the part presided over by the centre affected. Thus we have mental, motor, sensory, visceral and trophic activities or paralysis. Viewed from this standpoint, it follows that hysteria is a disease of considerable seriousness. It is not the play disease we are likely to think it. The fact that its phases may simulate other diseases, and that instances are not uncommon where it has so closely resembled other affections that a differential diagnosis has been most difficult, if not impossible, is another reason why its existence should be considered as one of great importance. It displays "ear-marks," which are generally present, and which lend material aid to its detection. This is especially true of the mental symptoms. First, selfishness. The hysterical patient looks out for number one. He craves attention; he likes to see others affected by his symptoms or antics. He wants sympathy, and in order to receive it he is willing to distress even those he loves best by magnifying his alleged pains and with vociferous outbursts of anger, joy and sorrow. Second, avoids danger. When he has a convulsion he always sees to it that he falls upon a couch or other

soft spot, and that the clonic spasms do not occur at a time or in a place where he can be injured. Third, the emotional outbursts are excessive in comparison with the exciting cause. The shrieks of laughter, alternating perhaps with heartrending wails or outbursts of vehement anger following some trifling remark or act of another, are far in excess of the emotional exhibition which would be produced in one not predisposed to this disease.

That these stigmata must be the result of abnormal mental action is apparent to everyone. This leads to the proposition that there is mental derangement present, akin to insanity, to produce such a condition. Indeed, the relation of hysteria to insanity is so close that not rarely hysteria passes into insanity, and hysterical outbursts are not unknown among the insane.

"Ear-marks" also exist in the motor, sensory and trophic changes displayed by this disease. These are: First, the irregularity of their anatomical distribution, such as motor paralysis of one leg or both arms, or a leg and an arm of opposite sides; hyperesthesia or anaesthesia in patches, and atrophy in certain muscles, while other paralyzed muscles, supplied by the same nerves, show no trophic changes. Secondly, in the rapidity and severity of the onset and the suddenness with which the condition passes away. Exceptionally, however, such stigmata are not present, and then great difficulty in diagnosis is encountered. Another difficulty which occasionally confronts the diagnostician is when hysteria is grafted on an organic cerebral trouble.

Members of the medical profession commonly underestimate the frequency of this disease among men, and charge symptoms of hysteria to women, when they do not have such an origin. Most authorities state that twenty cases occur among women to one case among men. This proportion is probably incorrect, especially in the United States.

In a paper of this kind, which must be short, we cannot further discuss in a general way the history, manifestations and symptoms of this improperly understood disease, but will present four cases illustrating it in the male.

No 1.—Age 19; single. Family history disclosed that his mother was insane, and probably other members of her family were similarly afflicted.

This young man was tall, of light complexion, blue eyes, and exceedingly youthful in appearance. Acknowledged prepubic masturbation, but claimed not to have indulged in the vice recently. Friends stated, and, as we soon discovered, he was still an inveterate votary at the shrine of Onan. His emotional outbursts had been severe for four years. His general health was very fair, excepting that he had a weak heart. Upon slight provocation he would suddenly burst out into loud laughter, which soon alternated with a similar period of anger, when he would bite or strike those near him. After half an hour or more of such an exhibition, it would culminate in a convulsive seizure resembling epilepsy, from which he would recover, exhausted. No harm ever came to him while in a convulsion. It usually took place on a bed. He was always penitent after the storm had passed, and claimed that he was unable to control himself. In the course of a few weeks the performance would be repeated. This young man gradually became demented, but continued to have outbursts of like nature. He has now been an inmate of a hospital for insane for several years.

No. 2.—Age 27 years; married; clerk. Mother was hysterical. Further family history is unknown to us. Patient is short, slender, dark complexion, effeminate in manner, and has a soprano voice.

General health has always been fair, but never robust. Admitted masturbating while a boy, and probably began before puberty. Like all of his class, denies having indulged recently. The hysterical outburst we shall describe is said to have been the first. It was excited by jealousy. A boy, twenty years of age, towards whom the patient cherished an unnatural attachment, had recently become engaged to be married. Our patient, upon the receipt of this information, was taken sick with a violent headache, which was soon followed by copious weeping, and later by exaltation and some excitement. During the latter period he called for his boy friend in a wailing tone of voice, upbraiding him for his faithlessness, and promising forgiveness if he would only return to him. After a day or two of such lamentations he became possessed of delusions: First, that he and his boy-lover were travelling together, and that he desired to conceal his identity, so as not to be taken home, and in order to accomplish this he destroyed every article he could reach containing his name, among other things a note for sixty dollars payable to his order; and second, claimed that he did not know his wife. These delusions and the mental confusion accompanying them continued for several days.

When we were called in consultation we found that he had driven his wife out of the room, under the delusion that he did

not know her, and that he still maintained that he was not at home, but travelling in Wisconsin. He had also made threats of violence towards anyone who tried to enter his room. He called to the boy, before referred to, in an absurdly sorrowful and despairing tone of voice. We discovered him in his bedroom, with his door closed and himself wedged back of the door, to keep anyone from entering. When the door was pushed open wide enough for the writer to enter, the patient was directed to get up. He answered, in a childish, petulant way, "I won't, and no one can make me." He was gently lifted up and placed in bed, when he declared that we were brutes, and "I think you are real mean and rude." He kept his eyes closed tightly all this time and refused to open them; when told that he must look at the speaker, he opened and closed them rapidly for several minutes. He was then informed that his behavior was childish and his nonsense distressed his wife. He stated that he did not know who his wife was, as he was sure he had never been married, and that all he wanted was —, his boy friend. He was then impressed thoroughly with the fact that he was not believed, and told that his wife was coming into the room, and that he must address her politely by her proper name and answer her questions correctly. After a whining remonstrance, he agreed to do as we requested. His wife then entered, and he acted perfectly sensibly with her. After this time he behaved as sanely as usual.

A physical examination disclosed a penis about the size of that of a boy of eight years of age. His scrotum and penis were cold and clammy. He stated that he had never had satisfactory intercourse with his wife because of a premature ejaculation of semen, which exhausted him very much.

His wife stated that a few days before the attack began his boy friend had spent the day with him, and that he sat on the boy's lap or the boy on his lap all day, and that they were very affectionate towards each other. In an interview with the boy it was disclosed that they had been committing sodomy for about a year, the boy being the passive agent.

The patient recovered his health in a few weeks, and later increased in flesh considerably. He had another attack in about two months, but it was lighter and lasted a very short time.

No. 3.—Age 24; single. Belongs to a nervous family, but the ancestral history is unknown to the writer. The young man bears many of the stigmata of degeneracy, such as: Flat malar bones, projecting and square under jaw, high-domed palate and broad and rather low forehead.

He became enamoured with a young woman below him in social position, his attentions to whom his family strongly ob-

jected. Suddenly, without any apparent cause, excepting the opposition to his choice of lady-love, he became very violent and profane, endeavoring to strike his aged father and younger brother, at the same time calling them opprobrious names. He was promptly secured to his bed with trunk-straps. He continued to make violent efforts to extricate himself, and to use abusive language until exhausted, when he fell asleep. A few nights later he informed his family that he felt a "spell" coming on; he was promptly tied down to his bed, and the excitement soon passed away. Another attack occurred a few nights after, when he assaulted his brother in a cowardly manner. The family physician was called, who succeeded in quieting him.

At midnight, forty-eight hours later, we were called in consultation. We found the patient secured to the bed in the usual way and in a convulsion, which had lasted twenty minutes. His countenance was flushed, but not dusky; there was no movement of the face, excepting such as was incidental to slow and strong flexion and extension of the forearms; there was no frothing at the mouth; his eyelids were closed, and he resisted their separation; the legs were quiet; he was covered with a warm perspiration and his pulse was normal. In a few moments he ceased his motions, opened his eyes and answered questions, talked and laughed pleasantly.

The next day a careful physical examination disclosed the signs of degeneracy before enumerated, also that his color-field was contracted and chromatelopsis was present in the left eye. There was also a loss of balance of the ocular muscles. No anæsthesia was found, but a hyperæsthetic spot about two inches square was noticed on the inside of the left thigh. The generative organs were normal. His sphincter ani was very much contracted and the prostate gland was enlarged.

He talked rationally on all subjects, excepting that he maintained that he could not control himself when the "spells" came on.

He was advised to have his eyes treated and his sphincter stretched, neither of which, however, was done.

He did not have another violent spell.

A few months afterwards he stabbed himself in the chest with a small pocket-knife, because of a quarrel with his lady-love. No harm followed. In this case there was great sexual erethism, but, as far as known, no masturbation or sexual indulgence.

No. 4.—Age 23; single. Maternal grandmother was insane. One of his mother's sisters was an epileptic. Father is nervous, but no history of insanity or nervous diseases on the paternal side was acknowledged.

Patient is tall, dark-complexioned, and has always been nerv-

ous: is in the habit of biting his finger-nails and small pieces of skin from the ends of his fingers. The exciting cause of the hysterical exhibition was a railroad injury. He was thrown across the car, and struck his head a violent blow; was stunned, but recovered himself quickly. About a week after the accident he complained of pain in his head, and appeared to have difficulty in walking. A few days later he declared that he could not stand.

Upon examination there appeared to be motor paralysis of the left leg. All of his reflexes were found normal except the patellar and plantar were apparently exaggerated. When placed on his feet, reeled and fell on the bed. There was anæsthesia and analgesia of the left thigh and leg, and a hyperæsthetic spot was found in the centre of the extensor aspect of the right thigh, and also a small spot on the back of the right hand. There was loss of power to distinguish green shades with the left eye.

He was very emotional, and any reference to his condition brought tears. He was quite irritable. No physical abnormalities were discovered, and there was no admission or evidence of masturbation.

His appetite was good and his functions were all normally carried on. Rest and galvanism were prescribed, under which he recovered in about six weeks.

Before outlining the treatment and concluding the paper, let us summarize some of the points we have endeavored to bring to your attention.

First.—Hysteria is a disease of the cerebral convolutions. This point is proved by the fact that many of its manifestations are evidently beyond the control of the patient, and also by instances in which insanity has followed it.

Second.—That it always has an hereditary basis, as disclosed by ancestral history or marks of degeneracy.

Third.—That it should never be considered trivial, its liability to recurrence and tendency towards chronicity always being present.

Fourth.—That the exciting cause is generally reflex.

Fifth.—That its distinguishing features are its peculiar anatomical distribution in motor and sensory spheres and the extreme selfishness of its disturbed mental manifestations.

Sixth.—That the disease is less common among women than popularly supposed, and more frequent among men than commonly suspected.

The therapeutic indications lie in searching for and removing the reflex cause, firm discipline, with rules for correct living, proper diet and the carefully-selected remedy. Drugs are secondary in importance, however, to the other means referred to; but as those especially useful stand hyosc., ign., puls. and acon., these are most frequently indicated in the order named. Countless other remedies, from abies to zizia, may be called for and prove useful.

Another important element in the treatment is tact on the part of the physician. He should know when and how to use severe measures and the proper time to calm and pacify the patient.

Often, too, the physician's greatest difficulty will be the treatment and management of the relatives of the patient by whom he is surrounded, and who are, of course, of the same diathesis. They will cause more anxiety and trouble than the sick man.

The results are, however, comparatively satisfactory if the physician is gifted with good sense as well as medical skill.

SYPHILIS IN ITS SANITARY ASPECTS.

BY EDWARD M. GRAMM, M.D., PHILADELPHIA.

(Read before the Philadelphia Medical Club, April 7, 1897.)

THE civilization of the present day guarantees to every individual his right to life, liberty and the pursuit of happiness to the fullest extent. Paternalism is frowned upon by the spirit of our American institutions, and the courts of highest resort protect the individual from the least semblance of interference with his rights. The syphilitic is, on that account, hard to reach in an endeavor which might be made to restrict his personal liberty during the period when he is able to communicate infection to those with whom he comes in contact. Yet it is within the ken of all present that many an individual would at the present time be enjoying health, and it may be life, if it had been possible to keep some one isolated in such a manner that the disease could not have been transmitted. To many, even among physicians, the acquisition of syphilis presupposes

sexual intercourse, which we know is not a fact in a great many instances. Indulgence in sexual pleasures has, of course, to answer for the great majority of cases; and nothing surprises me more, in dealing with patients suffering from the disease, than the avidity with which they seek to indulge their appetite for those pleasures after they get over the first shock of the knowledge that they are affected with a disease which takes a long time to run its course. Many seek partners, with the guilty knowledge that by doing so they jeopardize the health and even the life of those who are willing to gratify them. As the sexual appetite is so imperative with most men and many women, and as most people have had no instruction in reference to its indulgence (the subject being avoided as unclean and secret by educators and parents), almost every one grows up in total ignorance of proper sexual indulgence and restraint. The physician knows that advice on the subject is not given more than passing notice, even when it is asked.

The present is a time when attention is being given to the sources of infection by the various diseases which have heretofore passed unnoticed by the community at large. Diphtheria, scarlatina, whooping-cough, measles, tuberculosis, receive their share of attention by boards of health, by large corporations employing people in various stages of health and disease, by corporations employed in the transportation of human beings, and by private individuals. Various schemes of quarantine, or at least supervision, of patients affected with diseases known to be infectious are broached from time to time, and find strong advocates, and as strong opponents. The newspapers take up the hue and cry after it is once started by those interested and air both sides of the question, with the effect of educating the masses still further in the direction of their duty in the premises. The expenditure of large sums of money is talked about in the endeavor to protect the present and unborn generations of men from the ravages of preventable disease, but syphilis is never mentioned.

To one who comes in contact much with patients affected with the disease, and who has learned by experience how many of the community are or have been the victims of the infection, and who sees how many of those whose forms are ravaged by the disease have acquired it in total innocence, the subject of the

prevention of its spread is an engrossing one. How can we, as physicians, do our share in preventing others than those under our care from contracting it; how can we as citizens advise measures which will limit it; how can those whose duty it is to enact, enforce, and uphold beneficent laws on the subject perform their duty? These are knotty questions which have passed through many minds, but the answers to them are not yet clear. If we, as physicians, notify the nearest and dearest to those who come to us with chancre that they are in danger of contracting a dangerous disease from our patient, how long would he come to us in the first place, and how much influence for good will we have over him in the second? If syphilis is made the subject of a report to boards of health, how soon will the dishonest and time-serving physician and the charlatan have all the cases of venereal diseases under his care and the community suffer thereby? Is a person who is dependent upon his labor for his maintenance to be deprived of it by excluding him from the company of the rest of the employes where he pursues his vocation? Who is willing to give an immediate answer?

It is a well-known fact that syphilis, where it is passed along the endless line by sexual intercourse, is much more rarely transmitted by inmates in houses of prostitution than by those women who reside outside of them but whose livelihood is gained by catering to the sexual passion of the opposite sex. Many women contract syphilis within houses of ill-fame; but the proprietress soon sends them away when their disease tells on the patronage of the establishment. Young women living at home and surrounded by moral influences contract the disease from renegades who obtain their consent to sexual indulgence, a consent which is marred only by the fear that intercourse may result in pregnancy, not once in many cases by the least thought of disease being an accompaniment of the pleasure obtained. It is true that some women have a hazy thought of "bad diseases," but they have not the least idea of how or why they were acquired by the person having them; they feel that such a one has been and is doing wrong, and that he ought to be shunned, but nothing tangible has been taught or told them, and therefore plausibility and a gentlemanly manner and clothing win the day, to their sorrow.

That the disease can be transmitted by mediate contagion almost never enters the mind of the laity. Even those who are known by women to have "bad diseases" are many times allowed to come into close contact with them in the household, the workshop, etc. Sad and numerous are the instances which come under the category of syphilis insontium. We can all recall some, even some whose baleful influence extended beyond the body of the first victim. That proper care could have prevented many of the cases none will deny; but on whom does the blame rest that preventive measures were not thought of and instituted?

It is an unfortunate fact that any one who broaches the subject of sexual matters, be he physician or layman, is branded as impure in his thoughts and intentions. Let any physician publish accounts of sexual perversions, sexual dangers, matters concerning sexual health, and many (even in the profession) hold up their hands in holy horror because in order to make the subject intelligible without inventing a language for the sole purpose of expressing thoughts on sexual subjects, the English language is employed, and clear statements made by which the author is enabled to express his meaning. It seems to me that just here is where the reform should begin that will ultimate in such a knowledge of the existence of syphilis and other venereal diseases, and of their method of propagation and prevention being disseminated, as will confine those diseases to the smallest possible number of human beings, it may be to those whose carelessness and recklessness entitle them to no better fate. Sexual matters should be investigated with a scientific accuracy, so that physicians, parents and educators could teach facts to the coming generations, facts of which it is the right of every developing individual to become cognizant through the teachings of those whose age and experience enable them to speak *ex cathedra*. No one who hears me to-night, I am sure, can point out an educator under whose care he has fallen in his young days who knew, much less taught him, his proper relation to the opposite sex. Not one of us, I feel certain, would be willing to say "My father or my mother took me aside and instructed me concerning sexual dangers and proper sexual gratification." Our medical works are conspicuous by the absence of positive and incontrovertible truths

relating to sexuality in the male and female. Accurate, scientific, eternal truths concerning so dominating a desire as the sexual one are, however, only the foundation-stones upon which to build when giving instruction which will lead individuals of both sexes to appreciate the possibility of contracting venereal diseases. Physicians, parents and instructors must have a clear knowledge of the disease under consideration (as well as of the other venereal affections), and be able to give convincing facts to growing boys and girls and to ignorant men and women. To advise a child to keep away from another, older, one because that one is "bad," is no way to impress the thought of danger upon the unsuspecting one, made unsuspecting through ignorance. So, also, when a boy or girl approaching manhood or womanhood shows by certain actions or expressions that sexual pleasures are not an unknown quantity any more, to advise our children to keep away from either, because he or she is not a fit companion for them, expresses ignorance or bigotry on our part to them; for, they argue, do we not know through companionship that he or she is bright, witty, kind, companionable? Place alongside of the statement that a certain person is not a fit companion for our growing sons and daughters, the reason—that such a one is frequently exposing himself to the possibility of contracting diseases which are communicable to them themselves, and they have a thought to turn over in their minds which breathes consideration for their welfare on our part. Let us, as physicians, do our part in instructing the community concerning sexual health, sexual hygiene, sexual diseases and contaminations acquired through sexual congress, and humanity will be in a better position to appreciate the dangers which hedge in promiscuous intercourse; but, first of all, let us become well-grounded in the facts bearing on sexuality in both sexes.

CALOMEL IN CATARRH OF THE MIDDLE EAR.—Chronic catarrhal inflammation of the middle ear, with persistent roaring in the ears, and chronic catarrh of the pharynx, not rarely may be cured by calomel 3-4x, especially when the fauces are red in appearance. It acts better in old than in young persons.—*Leipziger Populäre Zeitschrift fuer Homoeopathie*, Nos. 9-10, 1897.

THE DIAGNOSIS OF TYPHOID FEVER.

BY WM. H. VAN DEN BURG, M.D., NEW YORK CITY.

(Read before the American Institute of Homœopathy, June 23, 1897.)

THE diagnosis of typhoid fever is made by considering the totality of the clinical appearances.

A diagnosis by exclusion is the only one possible in some few cases. Occasionally the ætiological factors in individual cases are of great help in arriving at a conclusion; for the fact is now almost universally recognized that the typhoid poison is contained in the fæces of the patient, and, by its dissemination, communicated to others. It is seldom possible, however, in either private or public practice, to trace an infection to its source. When this can be done, it materially sustains the previously probable diagnosis of typhoid.

It is my experience, even in typical cases, that the first week rarely presents symptoms sufficiently characteristic to lead to positive conclusions. After the first week, in this class of cases, the diagnosis is comparatively easy. A certain class of cases run such a peculiarly atypical course that even as late as the convalescent period doubt may remain as to the disease. A probable diagnosis is the only one reached by the present clinical methods in such cases.

For the clinician, typhoid proper begins with the appearance of the fever. Previous to this, during a period varying from a couple of days to a couple of weeks, various prodromal symptoms are present, such as lassitude, headache, mental dulness, loss of appetite, slight diarrhœa, dizziness, noises in the ears, restless sleep and occasional epistaxis. These, however, serve only to render a case suspicious. If they be followed by fever and an enlarged spleen, the case is quite likely to prove to be one of typhoid.

The fever proper is rarely ushered in with a single chill; oftener with repeated chilliness, or frequently with well-marked nervous symptoms only; or, again, with no symptoms whatever, but a feeling of general discomfort. Through thousands of observations the well-known characteristic temperature-curve

of typhoid has been established, with its peculiar step-like rise during the first week, the two succeeding weeks of continuous fever, followed by the period of marked remissions, and its gradual decline by lysis. This peculiar type of fever forms one of the most important diagnostic symptoms of the disease. Wide divergence from this will be frequently met with, but the majority of cases clearly correspond to it. The recognition of the fact that the remitting period of the fever belongs to typhoid is important, that it may not be mistaken for a new infection or some other disease or complication.

Leube lays great diagnostic stress upon the character and frequency of the pulse in its relation to the height of the temperature. The pulse is usually dichrotic and weak, but these features are common to all fevers. Of much greater importance is the fact that in typhoid the pulse, in general, is not so rapid as in other infectious diseases. That is, with a temperature of 104° F., in general, a pulse of 120 is expected; whereas, in typhoid it usually ranges from 90 to 110 per minute. No satisfactory explanation of this phenomenon has yet been offered. This peculiarity of relative slowness has been very often observed in light cases and in the first stages of severe ones. In the latter, this being the only time when the diagnosis is doubtful, I regard it as a very important symptom of the disease.

The examination of the blood in typhoid fever offers one of the surest helps to a positive diagnosis that we now possess, in that it enables us in uncomplicated cases to exclude other diseases. So far as has been learned up to the present, there is no condition of the blood which is characteristic for typhoid itself; but, from numerous observations, it has been shown that in not more than 1 or 2 per cent. of the uncomplicated cases does leucocytosis exist, whereas in nearly all, if not all, diseases which are liable to be confounded with typhoid in the early stages, a prominent leucocytosis does exist. Therefore, blood examination often gives decisive evidence early in doubtful cases.

This one fact alone, until a very recent date, was the only help we had from blood examinations. In 1896, in *La Semaine Medicale*, Widal described a peculiar reaction of the blood of typhoid fever patients upon pure cultures of Erberth's bacillus,

which he considered characteristic. The reaction has been much discussed of late, and the reports so far published, in the main, confirm the original observations. Personally, I have had too little experience in the use of this test to advance any views upon it; but, judging from the reports so far obtainable, it promises to be a very early and reliable symptom. It certainly should be employed in all suspected cases, and employed early, and often repeated, that we may ascertain just how early in a case we can expect reliable information from its use.

Tympanites is usually an early and constant symptom, but not especially diagnostic in itself.

Some years ago the gurgling sound produced by pressure in the ileo-cæcal region was regarded as a very important symptom of this disease. This phenomenon, the result of mingling of gas and fluid in the intestine—which condition may occur in health and in almost any disease—no longer has any diagnostic value.

Somewhat more important than the last is the presence of diarrhœaic stools. To be sure, diarrhœa is not present in all cases, but sufficiently often to make a diagnosis doubtful in case of its absence; also, the character of the stools themselves is by no means pathognomonic, although the well-known “pea-soup” appearance is suspicious, and the marked division of solids and fluids in the stool is not often seen in other diseases.

Diagnostically, the appearance of the tongue seems to be of more importance than the character of the stools. In the beginning the moist, sticky and evenly-coated tongue, after a few days becoming dry and in parts red, by the gradual disappearance of the coating from the edges and the tip, makes a rather characteristic appearance, and this, too, quite early in the disease. Later, the whole tongue becomes dry and red, simulating a piece of raw meat. These peculiarities are rarely seen in other diseases.

Bronchial catarrh is so frequently present, and that, too, in the first week, that it has been placed among the early and diagnostic symptoms. To be sure, it is not always present, but is usually found from the second week on.

The nervous system is almost universally affected in some way or another, but often not sufficiently early to be of assist-

ance in the diagnosis. The intensity and character of the nervous trouble varies all the way from stupor to restlessness and delirium.

The liver is frequently enlarged, and often may be felt as a soft tumor in the abdomen, but is of very little importance in helping to decide the character of the disease we have before us.

Much has been said and written about the urine in typhoid. For some time it was thought that a sure and early symptom had been discovered in the so-called diazo reaction of Ehrlich, but it has been demonstrated by many that, while the reaction is rarely absent in typhoid urine, it appears quite often in other infectious diseases, especially in tuberculosis and in measles. It has, therefore, ceased to be an important diagnostic sign, though, in connection with other appearances, it might help to establish a diagnosis in some atypical cases. I have seen in the past year three well-marked cases of typhoid where this symptom was absent during the entire course of the disease. So, aside from a slight albuminuria, which usually disappears with convalescence, the urine alone offers little help at present to an early diagnosis.

From a vast number of observations it has been shown that an eruption or roseola fails to appear at the most in twenty per cent. of the cases of typhoid. In itself the eruption is not characteristic. It usually appears on the abdomen and lower chest, and rarely but few spots appear, so that a very careful examination is often necessary to discover them. What is of great importance diagnostically is that the eruption appears first from the beginning to the middle of the second week of the fever, never before. This symptom, when it once appears, even though but a few spots, which are undoubted, can be found, is recognized as the most important symptom for establishing the diagnosis of typhoid. Care, however, must be taken not to confound other eruptions that may be present in the skin with the real typhoid roseola, which consists of small, round, pale-red flakes, which blanch easily under the finger. They must be carefully distinguished from small blisters or acne papules.

A somewhat less pathognomonic but more generally present, symptom (ninety per cent. of the cases) is the enlarged spleen,

which can almost always be made out by both percussion and palpation. This is more difficult, however, when the degree of meteorismus is considerable; but trained hands and careful examination can usually feel the enlarged organ projecting beyond the border of the ribs, which is very soft and rarely painful. So constantly is this symptom present during the whole course of the disease that I have heard Prof. Nothnagel repeatedly say that "one is not permitted to diagnose typhoid fever unless an enlarged spleen can be demonstrated."

Without considering the cases in which the various organs present the pronounced symptoms giving rise to the names of typhoid pneumonia, cerebral typhoid, renal typhoid, etc., it must be borne in mind that there is an abortive type of the disease which begins with severe symptoms but has a very short duration, one or two weeks being sufficient to establish convalescence—a mild type, which has the usual duration and course; but all symptoms are much less intense—so mild, at times, that it is often called "walking typhoid;" also an afebrile type, as shown by Liebermeister and Gerhardt, who have demonstrated that typhoid can run its entire course without any rise of temperature; so that the diagnosis is established through the presence of the spleen tumor, the roseola, the diazo reaction of the urine, the abnormal frequency and dichrotism of the pulse, the severe general weakness of the patient, etc. At times, too, the ætiology of the case assists in determining its nature.

In the present state of our knowledge there are six cardinal symptoms which stand out above all others in diagnostic value in typhoid fever:

1st. I would place the characteristic fever, especially when the case is seen early and temperature is taken regularly.

2d. The increased rapidity of the pulse, but its relative slowness as compared with the height of the temperature.

3d. The increase of size of the spleen, which can be recognized during the first week.

4th. The absence of leucocytosis.

5th. The characteristic reaction of the blood upon pure cultures of Eberth's bacilli (Widal's test).

6th. The roseola which appears during the second week.

Subordinate to these are all other symptoms, such as bron-

chitis, diarrhœa, appearance of the tongue, nervous symptoms, urinary reaction, tympanites, etc.

As yet the bacteriological examination of excreta offers no help in practice.

The more of the cardinal symptoms present, the surer will the diagnosis be. Next in relative importance to the above-mentioned cardinal symptoms come the stools, the appearance of the tongue, the bronchitis, the nervous disturbances, the enlargement of the liver, the epistaxis, and finally the ætiological factors and the complications, such as intestinal hæmorrhages and perforations, suppurations, periostitis, phlebitis, etc.

Against typhoid in general would be the appearance of coryza, sweats in the early stages, herpes, endocarditis, retraction of the abdomen, continued constipation and failing of diazo reaction of the urine, the presence of leucocytosis, and absence of spleen tumor.

Almost never in the first week of the disease can anything more than a probable diagnosis be arrived at. As stated above, it is frequently necessary to resort to diagnosis by exclusion, and frequent examinations of the patient are imperative.

Most difficult, perhaps, is it to distinguish between acute miliary tuberculosis and typhoid—in fact, at times impossible. This difficulty will be the more appreciated when we think that both diseases are apt to appear in previously apparently healthy individuals, that both have high fever and spleen tumors. In both is bronchitis present, with great prostration. Occasionally, also, has roseola been seen in tuberculosis, as well as the same nervous symptoms. Frequently the examination of the sputum and urine for tubercle bacilli offers no help in a differential diagnosis. However, in tuberculosis careful and repeated percussion and auscultation of the respiratory organs will show slight changes in the upper part of one or both lungs. A slight dullness, with a concentration of the rales at the apices rather than in the lower lobes, will point to tuberculosis. Then, too, the cyanosis and dyspnoea of tuberculosis are markedly greater than in typhoid—the cyanosis especially being a marked symptom, being far in excess of what might be expected from the distinguishable extent of the bronchial catarrh. The presence of pleuritic or pericarditic murmurs speaks more for tuberculosis

than typhoid. Here comes, also, the frequency of the pulse, which is usually much more rapid in tuberculosis from the very beginning than in typhoid. Spleen tumor and diazo reaction of urine may be present in both diseases, but both are more constant in typhoid. This applies also to roseola, although an eruption is decidedly more characteristic for typhoid; diarrhœa may be present in both diseases. A positive symptom for tuberculosis is the finding of tubercles in the choroid membrane. To be sure, these are not often found, but should be looked for, and when found establish a diagnosis beyond question. Occasionally a bacteriological examination of the blood will show one or the other characteristic micro-organisms. In tuberculosis in general the course of the fever is more irregular than in typhoid, though not always. Remissions during the height of the fever are rarely observed in typhoid except when a hemorrhage takes place, but may frequently occur in tuberculosis. In miliary tuberculosis there is more apt to be a leucocytosis present, though when unaccompanied by pus formation the number of the leucocytes may be normal.

Septicæmia or septicopyæmia, when not the result of an external wound, may at times simulate typhoid, but can usually be distinguished by the character of the fever, which usually has frequent remissions and exacerbations, often accompanied by chills or chilliness; frequent involvement of the endocardium; painful swelling of the joints; the more rapid and irregular pulse; the difference in the character of the eruption; and last but not least the blood examination, which shows always the presence of a leucocytosis in pyæmia.

Typhus fever can scarcely be mistaken for typhoid. Confusion may arise in rare instances from the presence of a profuse dark-colored eruption, in the latter disease. The eruption which often appears in typhus as early as the fourth day, in dark-red, irregular spots, is more numerous and more generally distributed than in typhoid. The fever of typhus is sudden in its onset. The greater relative rapidity of the pulse, also the presence of conjunctivitis and coryza, will usually serve to distinguish the latter disease. The presence of an epidemic of typhus is also an important point in establishing a diagnosis.

In relapsing fever the presence of the corkscrew-like spirals in the blood offer a positive diagnostic sign. Besides this, re-

lapsing fever has a sudden and violent onset with continual high fever for about a week, which terminates by crisis, when the process repeats itself. There are also no other symptoms of typhoid present.

Remittent malarial fever may closely simulate typhoid and cause confusion in diagnosis, especially in districts where malaria is known to exist. But the sudden onset of the disease, the more marked gastric and bilious symptoms, the occurrence of herpes, the frequent occurrence of sweating, will point to the malarial nature of the infection. A careful examination of the blood for malarial plasmodia will usually make the diagnosis clear at once, for in the present state of our knowledge it is scarcely justifiable to diagnose malarial fever without finding the specific infection in the blood. Finally, a large dose of quinine as a test will remove all doubt.

Cerebro-spinal fever or meningitis is often confounded with typhoid, but in the former the fever runs a less typical course. The abdomen is usually sunken, not tympanitic; the general hyperæsthesia, and especially the headache, is more pronounced in meningitis. Eruptions of herpes are frequent as opposed to typhoid. The general nervous symptoms in meningitis are progressive and not influenced by treatment, especially antipyretic measures, which will usually temporarily relieve those of typhoid. Vomiting is more common than in typhoid, also convulsions and paralysis. Diarrhœa and enlarged spleen are usually absent. Further, it is dangerous to make a diagnosis of meningitis unless a definite cause for its presence can be shown; and as Leube says, "Any diagnosis of meningitis, no matter how apparently well-founded it may be, stands upon weak legs when a positive cause for its presence is not found." The ophthalmoscopic examinations should not be neglected in this disease, as it frequently shows an optic neuritis or retinal hemorrhage.

Gastro-intestinal catarrh occasionally produces a train of symptoms which may be mistaken for typhoid; but here the irregular character of the fever, presence of large quantities of mucus in the stools, the frequent eructations and colic, the absence of spleen tumor and epistaxis, as well as roseola, will usually easily decide the character of the case before us.

Lastly, I will mention uræmia, which may develop gradually

and pass into a typhoid state; but here a careful examination of the urine, which should never be neglected in any case of fever, will point out the right course, and no clinician who is worthy of the name will be likely to make a mistake.

THE NATURE OF HYSTERIA.

BY F. MORTIMER LAWRENCE, M.D., PHILADELPHIA.

(Read before the Clinical Society of St. Luke's Homœopathic Hospital.)

As a preface to my remarks, let me say that hysteria as seen by American practitioners differs in considerable degree from the form made classical by the descriptions of Charcot and his associates of the Salpêtrière. Neurasthenia, whose key-note is exhaustion, and which is in many respects the close analogue of hysteria, is much more common. It is in great measure an acquired disease, while hysteria, even though its acute manifestations be of recent onset, is essentially a congenital neurosis whose roots extend back for generations. The *grand mal hystérique*, with its numerous phases, we rarely see; but we frequently meet with women who, as the result of the slightest shock, manifest a wide range of emotional phenomena. It is a disease of Protean forms; it may vary from a simple monoplegia to hemiplegia with aphasia, from muscular cramps to general epileptoid convulsions, and at times it is only by our inability to explain the phenomena by any conceivable organic lesion or combination of lesions that we at last recognize our old foe.

What is hysteria? In common with the other so-called functional neuroses, the nature of hysteria has from the moment of its recognition as a disease been a matter of speculation. The wide variety of its symptoms and of their exciting causes and their varying manifestations seem a sufficient excuse for the inability of pathologists to determine upon a specific lesion. Early observers were struck by its relation to the genital function, and in consequence the uterus was looked upon as the seat of the disease. Later, in the Middle Ages, when religious fears led to hysterical epidemics, the victims were, according to

the nature of their attacks, regarded as saints or as possessed of the devil: and when in the course of time both of these hypotheses had to be abandoned, scepticism took their place. That, as demonstrated by Mesmer's success, the disease could be cured by control of the imagination, seemed to imply that it was a disease of the imagination; and, as Fere remarks, "The people did not well distinguish at this time, or even later, between diseases of the imagination and imaginary diseases." Indeed, to this day the mass of the laity and not a few physicians cannot rid themselves of the idea that hysteria and malingering are synonymous.

In modern times clinical study of hysteria, particularly as seen in its association with the hypnotic phenomena, has led to its recognition as a distinct affection of the nervous system—a cerebral neurosis. "Certain unexpected associations in the paralyses from suggestion, such as that of the loss of articulate speech accompanying a paralysis of the right upper extremity and reproductions of the associations which are frequent in spontaneous lesions of the left cerebral hemisphere, has brought into favor the hypothesis of the localization of hysterical troubles in the cortical layer of the cerebral hemispheres." According to the teachings of the School of Nancy, all hysterical manifestations are the product of the imagination, and may be cured by anything which acts upon the imagination; while, as viewed by Charcot, hysteria is a psychical malady *par excellence*.*

Preston, in his recent monograph on hysteria, has well formulated the psychological theory upon which our modern conceptions of the disease are founded. Suggesting the further divisibility of the cerebral cortex, he postulates a subconscious cortical centre or centres to preside over the more mechanical working of the parts represented. Beyond this subconscious centre must be a conscious, volitional centre, which controls the former. Destruction of the lower centre breaks the mechanism, as in a true organic paralysis; here no amount of volition can move the affected limb. But in hysteria the lower segment is unaffected, nutrition and reflexes are unimpaired: there exists only the impossibility of performing voluntary movements. Since the lower centres show no signs

* Fere, *Twentieth Century Practice of Medicine*, vol. x.

of disease, we must look to the higher for our explanation. As is well known, a sudden shock—for instance, the house takes fire—and the patient is instantly cured. Were the lower centres, the cord or the peripheral nerves, involved, this would, of course, be impossible; and so we are forced to believe that the higher centres are at fault. In other words, the volitional centres are unable to act upon the lower ones under ordinary stimuli. This loss of control, although in the present state of our knowledge not clearly explicable, is possibly due to the exhaustion of the cell-protoplasm and a consequent inability to send forth a sufficient stimulus to arouse the lower centres, or it may be due to a temporary lack of communication between the two centres.

The latter hypothesis finds material support in the recent discoveries of Golgi and Cajal concerning the morphology of the nerve cells, particularly those of the cerebral cortex. It has been shown that the cortical neurons present not only protoplasmic extensions directed toward the surface of the cortex, but also a protoplasmic prolongation downward. This latter, formerly known to us as the axis-cylinder, and regarded as indivisible down to its point of termination at the periphery of the body—this, now known as the axon, has been shown to extend to terminate in the cord as a brush-like free extremity. Here it is in relation with the nerve cells of the spinal cord.

Within the present decade it was first suggested that nerve cells were capable of movement. Several investigators have advanced the idea that the neurons by movement are enabled to alter the degree of their relations to each other, and that by thus, as it were, breaking the connection, nerve-currents may be arrested, and, in turn, contiguity be established, in consequence of a certain erethism of the cell correlative to the will. Concrete application of this theory has been attempted in explanation of the phenomenon of sleep. It is assumed that the neurons, when functionally active, must be in relation with one another, this condition being a prerequisite for consciousness. When the cells are exhausted by fatigue, their volume becoming diminished, their processes retract and the cells are no longer in relation one to another. Isolation means cessation of function; general retraction of neurons means general cessation of function; and this is sleep.

A similar application of the theory has been made to hysteria.* Take, for instance, a sudden hysterical paralysis. What has happened? As a result of a shock, be it psychical or physical, the neurons of the cortical centre responsible for the affected region have retracted their processes to such an extent that the end-tufts in the spinal cord are no longer in normal relation with the spinal neurons, *i.e.*, the connection between the nerve cells is broken. Consequently, function is lost until such a time as an exercise of what we term the "will-power" may restore the connection. It is possible in this way to explain all the varying hysterical and hypnotic phenomena, as well as the action of opiates and anæsthetics, the results of cerebral concussion, and indeed the whole range of psychic states.

Without continuing to thus elaborate, however, I think that from the theories discussed we may safely make one deduction as to the nature of hysteria; and this has been so well stated by Eshner† that I reproduce his exact words: "In hysteria we have to deal essentially with a defect in the nervous co-ordination, an adequate cause for which can be conceived to reside in the metabolic alteration in the ultimate nervous elements resulting from modifications in cellular nutrition." This generalization, I am confident, accurately expresses the modern view as to the nature of hysteria.

In addition, one eminently practical corollary should be stated, and that is that success in the treatment of hysteria is to be attained, if at all, by nutritional agencies rather than by the use of drugs. Believing, with Gowers, that hysteria is in great measure a matter of temperament, under any circumstances the prognosis is none too favorable; but when, in any case, improved nutrition is attained after the removal of co-existing organic troubles, there is reason to hope for increased nervous stability and a happier life in the years to come.

CUPRUM is indicated in acute hydrocephalus after catarrhal and exanthematic fevers and difficult dentition.

* Dercum, *Journal of Mental and Nervous Diseases*, August, 1896.

† Eshner, *Medicine*, July, 1897.

A FEW USEFUL POINTS IN MINOR SURGERY.

BY F. H. PRITCHARD, M.D., WEAVER'S CORNERS, OHIO.

EVERY general practitioner, especially in country districts, does more or less minor surgery, with now and then a more serious operation. Every one also has a few favorite methods of doing this or that which he has found to stand the test of time and experience. I have gathered together a few which I modestly offer as of possible interest to some one.

For instance, in the matter of antiseptic gauze, though the iodoform gauze is very good, it is comparatively expensive. I generally make my own gauze which I use in ordinary wounds. I believe that Prof. Roswell Parke, of Buffalo, first suggested this method. I take ordinary sterilized gauze or "flag bunting," white, cutting it into strips of convenient length and breadth. Into a common fruit-jar of glass I then place a teaspoonful of common naphthalin, which costs about thirty to forty cents a pound, to each yard of the gauze strips. Then after the jar is packed loosely full I place the cover over the top, but *not screwed down*, and put it into the oven of a kitchen stove and allow it to become quite hot. The heat volatilizes the naphthalin and drives it up into the gauze. As soon as the drug has melted it may be taken out and permitted to cool, after which it is ready for use. This gauze is not equal to the iodoformized variety in wounds which the surgeon makes himself, yet as an antiseptic dressing for the general run of wounds coming to the surgeon, it is sufficient.

I make my own silk ligatures. I buy ordinary white silk twist at a cent a spool, wind the silk on a glass reel and put it into a glass bottle, filling up the bottle with nearly pure 95 per cent. carbolic acid. I generally use a preparation of the acid to which a little glycerine has been added, as then it will not recrystallize readily. These ligatures may be allowed to remain for a long time in a wound without becoming the seat of stitch-hole abscesses. I recently stitched up a young man's hand who had thrust that member into a "buzz-saw," and who, having lost a great deal of blood, I did not dare to clean up his hand

before suturing, as the wound was oozing profusely. I stitched through the dirty skin and arrested the hæmorrhage, after which I washed and scrubbed his hand with a 1:2000 bichloride solution. The stitches were removed in two weeks, and were not infected.

The ordinary sewing-twist silk is fully as good as any other and very inexpensive. By preserving it in pure carbolic acid it is apparently rendered aseptic.

As a dusting-powder a mixture of iodoform and boric acid, 1:8, I have used a great deal, and found it nearly as good as iodoform, with a great difference in the expense.

I formerly carried the ordinary bichloride tablets in my case, but of recent years I have used an acid solution of that antiseptic which I like much better for it is more penetrating, not forming as readily an insoluble albuminate as the ordinary tablets. It is made by taking an ounce each of the bichloride of mercury, common salt and hydrochloric acid; these are dissolved in a pint of pure rain water. A drachm of this to a pint of water makes a 1:2000 solution.

I have used the chloride of ethyl spray as a local anæsthetic quite a good deal, and I must say that I find it very convenient. For example, in paracentesis of the abdomen or chest, opening of felons, boils, phlegmons, removal of warts and small tumors, it enables one to do the operation without pain. It is far preferable to cocaine in such cases, as there is no danger of toxic symptoms developing, as nothing enters the circulation.

Cocaine seemingly very closely resembles in its action shock, so that where a tendency to such a state already exists the use of cocaine apparently aggravates. I have noticed this, in employing it in extracting teeth, with the injection of a local anæsthetic mixture into the gums.

TWO CASES OF ADDISON'S DISEASE.

BY N. B. DELAMATER, M.D., CHICAGO.

(Read before the Neurological Section of the American Institute of Homœopathy.)

MR. J., aged 56; father living, strong, robust, healthy. Mother died about forty-five from some very obscure trouble that was referred to the heart, kidneys, liver, and stomach.

There was certainly present pronounced anemia and great stomachic derangement, and it was a slow, steadily progressing disease.

The patient was an officer in the civil war. Contracted, during service, camp diarrhœa, and has ever since some tendency to bowel trouble, but not of a serious nature, nor of any one type. Has never been of a constipated habit.

Engaged in the mercantile business after the war, and remained with the same house up to this time, commencing as an office-helper, and advancing through all the various office positions to credit-man and finally to a partnership. It was one of the largest wholesale drygoods houses in this country.

Some ten years previous, on account of a series of occurrences, he was suddenly placed in the entire management of the business, and at a time when very extraordinary financiering was essential to the maintenance of the business. He was a man of remarkable physical as well as mental power and endurance. The worry and strain on him was beyond word-expression.

He began to show signs of digestive disturbance, then became irritable, then symptoms pointing to the kidneys or bladder, or both, such as irritable and irregular micturition, changes at frequent intervals in the character of the urine.

Then came constant feeling of fatigue, some disturbance of sleep; later a pronounced blurring of the vision, and an irregular accommodation which did not correct either with remedies or glasses. This was so marked as at times to make it impossible to read or write sometimes for a few minutes, then maybe a whole half day.

About this time he began to have a feeling of numbness in the little finger on the left hand; was constantly rubbing it; this seemed to remain stationary; did not increase in intensity or extent or diminish for months.

Then after a year or two of about this general condition, keeping at close hard work all the time, suddenly his lower lip began to swell; this extended over front to chin and in an hour was swelled to three times the normal size. Under belladonna the swelling rapidly subsided and the next day was entirely gone. This performance was repeated, and always without assignable cause, five or six times during the next year and a half.

At this time he began to be exceedingly nervous, irritable, and very despondent; gave up business; took a trip to Colorado; gone six weeks; returned, but found he could not attend to business; soon after was attacked with a vomiting spell; could retain nothing on his stomach for twenty-four hours; after this would have several times a day attacks of a feeling of nausea or faintness, could not be certain just which, lasting from one to five minutes; sometimes vertigo with it, sometimes not.

I now sent him to Dr. Pennoyer's sanitarium, where he was under most excellent care for some months and seemed to improve somewhat; he came home but found vision still very poor, general strength very little; marked numbness in both feet, also both little fingers; appetite capricious.

Under heavy feeding, massage, etc., he continued to improve for two or three months, when he went into Canada for a summer outing. Here he was out fishing, hunting, walking, rowing, and enjoying life generally for two or three months; he picked up in strength, flesh, spirits, and seemed in a fair way to recovery, when without any assignable cause he had an attack of vertigo, followed by a recurrence of all the symptoms and the positive refusal of the stomach to take care of or retain food. He started at once for home. I found him very prostrate and decidedly anæmic, the brain particularly anæmic, and he was tanned very dark; after a day or so made a full physical examination and found the tan in the protected parts as well as the unprotected. He regained control of the stomach in a few days and again began to improve, but in a week or two another attack, when the stomach would not retain liquid food. He whitened out completely all over the body in a month's time.

From this time on it was a gradual loss of strength, mental and physical, interspersed with occasional rallies of greater or less degree, but still from month to month a little loss all the time; gradual but fairly steady emaciation; frequent attacks of nausea or periods of from one to six or seven days when he could retain scarcely any nourishment; two or three mild attacks of diarrhœa; frequent attacks of vertigo or faintness, especially if the head was raised a little; tendency to stagger in walking; finally confined to the bed; somnolence for two or three weeks, gradually increasing to a pronounced coma and a

quiet death in a year's time from his coming home from Canada.

The numbness of the feet spread gradually up both legs to the body. The numbness of the hands increased in area somewhat but not very much. The vision varied from time to time very markedly, but was never so bad as when he first went to the sanitarium.

About two months after his return from Canada I discovered on various parts of the body the tanned appearance, spots that I suspected to be marks characteristic of Addison's disease, and which I subsequently became positive were the characteristic discolorations. There were irregular-shaped spots on both hands, three on the face, two on the chest, four or five on the back and a few on the legs. These spots gradually but irregularly increased in area, occasionally almost entirely disappearing.

The most careful physical examination failed to reveal organic disease of any of the viscera. The reflexes seemed to be normal, gradually diminishing as strength failed. In this respect both superficial and deep reflexes nearly alike.

Cutaneous sensation but little diminished in the numb parts; conduction of sensation gradually became a trifle slower but at no time exceedingly slow. Muscle-sense gradually a little less, but never lost.

Prof. Buffum watched the condition of the eyes carefully. I am indebted to him for the following report of what he found from time to time:

J. T. C., *et.* 54. March 13, 1894, complained of a blurring of vision in reading and desired an increase in the strength of his reading-glasses. Examination showed distant vision still normal. No changes perceptible in fundus, no contraction of field and scotoma detectable. Two months later the vision in each eye was reduced to $\frac{2}{30}$ with no improvement from glasses. With his reading-glasses, + 2.75, still reads No. 1 Jager with good range, but complains of a blur over the whole page and nausea if the effort to read is continued for a few minutes. In July the vision had fallen to $\frac{2}{40}$ O. D. $\frac{2}{40}$ + O. S. Cannot read anything but the large headlines of the newspaper and the blur is much greater after the effort. A well-defined central scotoma of each eye is present, and slight haze in the

region of each macula is perceptible with the ophthalmoscope. During the following six months the condition remained about the same. In January, 1895, the vision had diminished to $\frac{2.0}{10.0}$ each eye, but with his + 2.75 could read No. 3 Jager slowly. In February the vision had risen to $\frac{2.0}{4.0}$, general blur much less, and with his glasses read No. 2. In May the vision had again dropped to $\frac{2.0}{7.0}$, with complaint of increased blur both for distant and near vision. No further change in fundus beyond the hazy appearance of the macula lutea.

From this time to the end there was very little change in the appearance of eyes or in vision other than is accounted for by the mental failure accompanying the prostration and the final somnolence and coma.

The urine had for eight or ten years been thoroughly analyzed about every six months, and more frequently during the last two years. The analyses were all made by Prof. Clifford Mitchell, who had every time the full quantity for twenty-four hours.

At no time was there evidence of renal disease; two or three times there was evidence of slight cystitis.

As early as October, 1894, previous to any symptoms other than those of the eye and the general neurasthenic condition, the urine began to show a peculiar and uncommon condition.

I select four typical analyses, giving only what is essential to show the abnormal conditions present:

	I.	II.	III.	IV.
Fl. oz., 24 hours,	21	42	17	18
Urea,	310 grs.	342 grs.	205 grs.	270 grs.
Phos. acid, . . .	15 "	17 "	12 "	18 "
Uric acid, . . .	.....	.....	6 "	6½ "
Total solids, .	.....	650 "	525 "	525 "
Ratio urea to				
phos. acid, . .	.....	19 to 1	17 to 1	15 to 1
Ratio urea to				
uric acid, . . .	.....	.....	34 to 1	41 to 1
No albumin, no sugar, no casts.				

Two examinations of the blood showed a diminished number of red corpuscles, and of course a relative increase in the white, but positively no other abnormal elements.

About one year ago Mr. G., a brother of the former patient,

a man about 50 years of age, consulted me. I had known him for a good many years.

The family history, of course, the same as previous patient. No history of injury or of serious illness at any time in his life; no army service; no derangement of the digestion or bowels, except of a temporary nature, in his history. He had, however, been addicted to the use of all kinds of liquor since a young man.

Would go on tremendous spree, and then either drink fairly moderately or stop altogether for a while. For about four years previous to calling on me this time had not been on a spree or drank to any excess, if at all.

He complained at this time of being very much emaciated, of being very weak physically and mentally. He could not collect his thoughts; he could not remember anything at all clearly; was inclined to be melancholy and morose; had formerly been vivacious and a voluble talker.

Could sleep at any time of day or night. A slight tendency to diarrhoea: simply a few thin, yellowish discharges, not very copious; no pain. A physical examination made with great care failed to reveal any organic trouble anywhere except such as the urinalysis indicated. There was no history of syphilis in either of the cases. In fact I was entirely unable to find any sufficient reason for his rapid and pronounced decline.

The examination of the blood, while it showed a lowered ratio of red corpuscles, was not seemingly sufficient to account for the condition.

Having the other case on hand at this time, and knowing or believing I knew what it was, made me suspicious of the same in this case. I was, however, obliged to say I did not know, and that I would have to await developments.

No treatment that I gave him seemed to have the slightest effect, except occasionally for some few temporary symptoms.

In the course of about two months he had an attack, in which he could not keep anything on his stomach, lasting two or three days only. The history of the case from this time on was a steady, regular loss of flesh—fat, muscular and connective tissue seeming to melt away; also a steady, regular loss of both mental and physical strength, until he was unable to get about or to realize what was going on about him, with

irregular attacks of the inability to keep anything on his stomach, lasting from three to fourteen days. With these a numbness, or rather a formication of the legs, commencing at the feet, and gradually spreading up both legs to the body, appeared. About four months after I first saw him I was able to detect the spots characteristic of Addison's disease; they appeared on the legs first, then on the chest, later on the back, then on the thigh, and last on the face. They were irregular in shape and size, varied considerably in shade, but were all like a brown tan. He died in coma.

In this case succeeded in getting a post-mortem examination, which fully confirmed the diagnosis of Addison's disease.

Had but one analysis of the urine in this case; was unable to secure urine for examination again, owing to inattention on his and the attendant's part.

This analysis showed 26 fl. oz. in the 24 hours.

"	"	Urea, 212 grs.	"	"
"	"	Phos. acid, 12½	"	"
"	"	Uric acid, 5	"	"
"	"	Solids, 800 grs.	"	"

Ratio urea to Phos. acid, 25 to 1.

" " Uric acid, 60 " 1.

No albumin, no casts, no sugar. Very little mucous or epithelium of any kind. No crystals of any kind.

My object in preparing this paper is not to go over the old ground of Etiology, Morbid Anatomy, Pathology and treatment, nor to discuss and settle the functions of the suprarenal capsules. It is to call special attention to a fact that, so far as I am able to learn, has been mentioned but once. Zuelzer claimed that great deficiency of phosphoric acid combined with a large increase of the ratio of urea to phosphoric acid is characteristic of Addison's disease. You will note that in both of these cases the phos. acid is very low—in the first case from 12 to 18 grs., and in the second 12½ grs. The normal should be not much less than 31 grs. for men of their size. The ratio of urea to phos. acid in the first is from 15 to 1, and in the other it is 25 to 1. The normal ratio is 8 or 10 to 1.

Out of some 500 or more analyses made for me by Prof. Clifford Mitchell, there is not another case in which these two conditions are found combined.

In this connection I may mention a case in which, from the absence of these conditions, I refused to agree with two prominent and thoroughly good diagnosticians in a case in which I was called as consultant, and the future history of the case justified my position.

I am well aware that the presence of this condition in two cases and its absence in one spurious case does not make an absolute rule, but it may be considered as strongly confirmatory of Zuelzer's statement.

I believe it to be at least a valuable aid in the early diagnosis of this disease.

The analyses of urea were made with the Doremus clinical instrument, but those for phosphoric acid with uranium nitrate, volumetric method. When these two methods are compared, the normal ratio of urea to phosphoric acid is from 8 or 12 to 1.

THE SYMPTOM—TINNITUS AURIUM.

BY HENRY C. HOUGHTON, M.D., NEW YORK.

(Read before the American Institute of Homœopathy, June 24, 1897.)

TINNITUS aurium is simply a symptom; at first a red light, a danger signal, suggesting possible disease in some part of the auditory mechanism; at last a distressing factor in the life of the individual, which must have been an experience in that of the one who wrote Ecclesiastes, for these are his words: "The doors shall be shut in the streets" (he was deaf) "when the sound of the grinding is low" (he had a tinnitus of short vibrations), "and he shall rise up at the sound of the bird" (many a patient has looked for a swallow other than water), . . . "and the grasshopper shall be a burden" (the tinnitus was mixed, high-pitched, like the sound of a locust), "and desire shall fail" (both for personal life and reproduction of the species).

How vivid the picture! Many times have we heard "I wish I might die, and be rid of this infernal racket."

At one time this symptom stood at one extreme of ear disease as "nervous deafness," and another symptom, "otor-

rhœa," at the other, to express all ear disease other than nervous.

One beneficent result of modern otology has been the recognition of disease of the middle ear as the cause of subjective symptoms. Now nervous deafness will be limited to the internal ear, a close differential diagnosis leading to treatment with a hopeful prognosis. Many cases of disease of the middle ear have in times past been abandoned to the progressive changes because the general practitioner classed them as "nervous," on account of the tinnitus.

Any effort to relieve this symptom must be based on a study of causation. This may be external to the auditory mechanism, in the form of reflexes of dental, nasal or other peripheral irritations. It may be within the aural territory; then one can hardly find a point from the rim of the auricle to the lamina cribrosa ossea which may not be fertile with objective basis for subjective symptoms. Traumatism of the auricle, stenosis or closure of the meatus, foreign bodies, or even exposure of the membrana tympani to the air, raises mental protest. Scales of cutis free on the drumhead will cause a distress that is excessive, and may be long endured because the source is passed unnoticed. The middle ear is still more fruitful, and modern research is making us aware of the possibilities of as fine shadings in differential diagnosis of the lesions of the acoustic nerve as have been made upon the optic nerve tract.

Let us now review in natural order the causation of this symptom. Any changes in the integument of the auricle and external auditory canal may produce it by peripheral irritation of the cutaneous nerves. But in the great majority of cases it is undoubtedly due to the accumulation of scales of epidermis or exudation in the tissues, causing pressure within the middle ear, and modifying the intralabyrinthine pressure. The growth of parasitic germs, more especially the aspergillus, acts in the same manner, but usually the subjective symptoms are those of the presence of a foreign body rather than those of audition. Accumulation of cerumen or foreign bodies of various forms acts usually in the same way. Sometimes we see marked exceptions to the general rule. I recall one case in which a fireman connected with the City Department came to the Ophthalmic Hospital complaining of subjective sounds,

vertigo, and symptoms along the sympathetic tract, even involving the shoulder and arm. On examination, a white mass was found at the edge of the drumhead, and upon touching this with the probe it gave a sensation of stony hardness. On syringing, a small piece of white quartz was thrown out, and all the symptoms disappeared as if by magic. The pebble was thrown into the ear by a stream from the hydrant, as the patient was washing his head.

Diffuse inflammation of the canal acts, of course, in the same manner as eczema of the auricle or auditory canal.

Injury or inflammation of the membrana tympani is a very potent cause for very diverse subjective symptoms. The application of direct force will cause a sound as of breaking of any animal membrane. As this is followed by hæmorrhage, a change is noticed to softer or bubbling sounds. The subjective symptoms resulting from an extension to catarrhal or suppurative disease of the middle ear we will postpone for a later moment. The old-time custom of syringing the ear for every form of aural disease undoubtedly had a reasonable basis, as the general practitioner gave relief in many cases. I recall one instance: A young man suffering from this symptom was treated with varying success. On instilling a glycerole of verbascum in the ear immediate and permanent relief was obtained, and the only conclusion that could possibly be reached was that it removed dry scales from the drumhead, as there was apparently no other effect produced upon the external or middle ear.

In many cases of intense congestion of the drumhead, due to irritation with some instrument, as ear-spoons, or particularly due to large masses of impacted material, the subjective symptoms and acute sensibility of function must be due to the deep-reaching influence of the hyperæmia. The tinnitus, however, is sometimes noticed to occur for a considerable time after all traces of hyperæmia have disappeared. Extensive changes may occur in the drumhead as the result of external disease rather than of middle ear disease, and such changes in the external layer of the threefold membrane undoubtedly cause changes in the mobility of certain nodes of the drumhead, thereby modifying its complete mobility, and giving rise to changes in the vibration of the auditory ossicular chain, as well as in the con-

tained air of the tympanum, and we can readily see that intralabyrinthine disturbance may result.

Before passing to the next division of our subject it may be better to consider treatment in relation to its causation, rather than to discuss it later. The indication, of course, is to remove the exciting cause. The morbid changes in the integument of the auricle, auditory canal or drumhead are amenable to both local and internal remedies. I am not a stickler for either, to the exclusion of the other. The internal remedy will undoubtedly do much, but the local means should never be neglected. There is a very general prejudice against applications of oil, on the part of some of our old-school teachers. Experience leads me to use, and to advise the use of, liquid vaseline in eczema, either acute or chronic, unless there is some idiosyncrasy on the part of the patient. For the removal of hardened masses, masses of cerumen, or the softer accumulations, equal parts of fluid vaseline and sulphuric ether is very effective. The calendulated petroleum is antiseptic, and the verbascum glycerole may be substituted for it when the petroleum causes irritation of the skin. The growth of the aspergillus is terminated by the application of equal parts of glycerine, alcohol and sulphuric ether.

There is no occasion, in this presence, to discuss the necessity or the methods to be adopted for the removal of foreign bodies. It is simply useless to prescribe internal remedies for the relief of subjective symptoms, unless one looks to the objective and external cause. Inflammation of the middle ear is the greatest factor in the causation of tinnitus aurium—acute catarrhal inflammation. It is worthy of notice how slight a catarrhal inflammation, on the one hand, may give rise to excessive subjective symptoms, and how serious an inflammation of the same sort may be free from the same symptom. Undoubtedly your experience coincides with mine in observation of musical people who were distressed beyond measure by catarrhal attacks that cause scarcely any hyperæmia of the drumhead, but gave rise to peculiar changes in the pitch of musical tones or extreme sensitiveness, or annoyance from tones of particular instruments. Without doubt these conditions are due to those fine shades of overtones which give the quality to our various musical instruments—one might say a modifica-

tion of sound-color. Sometimes these symptoms are relieved by inflation, using Valsalva's method, because the Politzer method aggravates them—probably by a displacement of the ginglymus articulation. As catarrhal disease progresses from its slighter to its more serious form, with extensive exudation, the subjective symptoms become more severe, and, as a rule, lower in pitch, due, no doubt, to the shortened vibrations. The symptom, however, is not as distressing in this form as in that usually known as "proliferous inflammation" or sclerosis of the middle ear. This form, otitis media hypertrophica, hyperplastica, sclerotica, etc., being characterized by a loss of the submucous tissue, results in excessive pressure upon the fenestra, thereby causing intralabyrinthine pressure. Connective tissue bands lying between the ossicula themselves, or between the ossicula and the drumhead, or between the drumhead and the labyrinthine wall, all are well-recognized factors in the causation of this symptom.

When the initial catarrhal disease passes rapidly to the suppurative form the subjective symptoms are usually modified in intensity, and chronic suppurative inflammation is, as a rule, much more free from subjective symptoms than the chronic catarrhal form. We have all seen suppurative disease proceeding to a fatal termination without annoying tinnitus.

In considering the treatment which is effective in relief of subjective auditory symptoms, based on lesions of the middle ear, there is more hope offered by internal remedies upon the acute catarrhal, the chronic catarrhal hypertrophic form, acute suppurative, and chronic suppurative forms, than upon the chronic catarrhal atrophic form. The well-known remedies, belladonna, chamomilla, hepar sulphur, mercurius and pulsatilla, are backed by a century and more of world-wide history. More recently capsicum, ferrum phosphoricum and gelseminum have not robbed the veterans of their honors, but demonstrated spheres of action peculiarly their own. In chronic catarrhal inflammation, with excessive exudation, the same is true of these remedies, not only for the condition itself but for the exacerbations due to acute coryza; and I deprecate the use of the knife, in view of the fact that it is so frequently followed by a change to the suppurative disease. In acute and chronic suppurative inflammation the same may be said of the internal

remedies: but in my judgment it is necessary to resort in the suppurative form to the knife in order to save the patient from greater destruction of the drumhead, and the readiness with which it repairs is sufficient warrant.

In the chronic form we should use those measures which antiseptic surgery has demonstrated as not only wise but obligatory. I have yet to see anything savoring of metastasis or suppression by the observance of such law.

I left the chronic catarrhal inflammation of the atrophic form to the last, because to the last it is the opprobrium of the aurist. Here, too, I am conservative as regards the knife. The simple fact is that our old-school colleagues, from being heroically radical, have become as excessively conservative. While it is true that a few cases have been for the time being, and others—still fewer—permanently relieved, I myself am convinced that many have been made worse, and have afterward been relieved by milder measures. And while massage by sound has, like all other panaceas, been relegated to its proper place, I must admit that it has done more to modify, relieve, and in many cases absolutely abolish the subjective symptoms, than any other method of treatment. Conjoined with faradism, recent observations argue that its effectiveness will be much increased.

Accepting, as most of us do, the vascular hypothesis of Theobald, anything that will tend to modify the rigidity of the middle ear mechanism must relieve the intralabyrinthine pressure; hence one must think well of those forms of pneumatic vibration, suction, traction, and so forth, which are more or less in vogue in the profession.

That the internal remedies will modify the mucous membrane of the middle ear we need not doubt, but any uniform results of a satisfactory character I have failed to see. The instillation of equal parts of fluid vaseline and sulphuric ether has been of decided service in a large number of instances, when used in connection with aural massage. Galvanization of the sympathetic nerves and faradization of the same have their advocates, but I have in recent years leaned entirely to the faradization.

In discussing the internal ear we are literally and metaphorically in a *labyrinth*. This much we may say, that any injury to

the temporal bone by severe concussion, or especially by a solution of continuity of the tissues, may give rise to immediate and continued subjective symptoms. The differential diagnosis of these conditions has been so thoroughly confirmed by post-mortem observations that it is unnecessary to argue the point. Not only so, but morbid symptoms, caused by the use of internal remedies, such as quinine and the salicylates of soda and potash, are constantly being presented to the aurists of our school. Independent of the toxic effect of these drugs, there is every reason to believe that not only in the senile stages of life, but much earlier in life, there is a parallelism to be drawn between the lesions of the optic and auditory nerve. There is no reason in the nature of things why hyperæmia of the labyrinth, either on the cochlear side or the vestibular portion, along the branchings of the nerve to the internal auditory canal, and even to the auditory centres, should not be subject to all those changes which have been more easily studied in the eye. Here, of course, we must depend upon internal remedies, and we are, in that respect, much better armed than our colleagues of the opposite school.

A VERIFICATION OF *NUX MOSCHATA*.—Dr. White, of Port Chester, N. Y., reports the case of a man, aged 26 years, who was admitted to the Women's Hospital of that village for the treatment of injuries resulting from the careless handling of a loaded gun. A charge had entered the skull at the right parietal eminence, on a line with the auditory canal. Condition, partial collapse, though conscious; motor paralysis of left upper limb and partial motor paralysis of left lower limb. Opening was enlarged to admit finger, when the charge of small shot, together with wadding, was found near the surface of cerebrum, the fissures of which were destroyed to the depth and diameter of one-quarter inch. The part was cleansed of all foreign matter and broken tissue and dressed antiseptically, and the patient convalesced in about six weeks, and was able to leave the hospital with entire motor paralysis of the arm and slight impairment of the leg. During his convalescence he suffered with severe headache, which was always better by hard pressure; he wanted the nurse to "bear her whole weight on it." With this headache he had rapid and anxious respiration; seemed as if he could not get air enough in his lungs, and that his "wind would be shut off." These symptoms were very nicely relieved by *nux mos.* 3x. When the medicine was stopped for a day, the pain in the head and rapid breathing would recur. Three times the medicine was stopped, with the same result. Finally he was given a higher potency, to use as required.—*Homœopathic Physician*, August, 1897.

EDITORIAL.

WM. H. BIGLER, A.M., M.D.

WM. W. VAN BAUN, M.D.

ALTRUISM.

It is with conflicting emotions that we read the reports of the various institutions devoted to the care of the helpless and incompetent, the incurable and the irreformable. From the standpoint of the sociologist we cannot but feel the weight of the burden which is imposed upon those outside of these institutions by the support, in a state of uselessness, of the thousands of their inmates. The tax upon the useful and creditable members of society to support the objects of its charity is immense, and if distributed in different directions would seemingly result in much greater good to the whole body politic.

From the standpoint of the physician, the preservation of so many lives which can never prove of any benefit to their possessors or to the community, and which are, in the majority of cases, only a burden and a long-drawn-out agony, seems irrational. It makes the physical regeneration of the race an impossibility, and multiplies the difficulty of combating disease a hundred-fold. Even our feelings of humanity, were they not warped by a false system of morals, and by a false conception of the duty of the physician, would prompt us to be as humane to our own kind as we are to the lower animals. The physician's duty is not only to prolong life but to relieve suffering. We cannot but be conscious of the fact that we are acting in direct contravention of Nature's law of the survival of the fittest, and we cannot but fear that a time will come when she will avenge herself for this disregard of one of her most beneficent provisions for the universal good.

It is not to be wondered at, therefore, that we see movements started here and there to limit at least the production of the unfitted, sometimes by legislative enactment, and sometimes, though more rarely, by public opinion. Witness the laws advocated to prevent the marriage of epileptics, of the imbecile, and of the insane; to castrate confirmed criminals; and, finally, that association of women who have bound themselves

to marry (if asked to do so, we presume,) only those who can present a clean bill of health.

But we live in an age of altruism, partly theoretical, partly practical; an altruism which embraces everything under heaven, beast and bird and fish, within its loving arms. Under its benign influence spring up the Audubon societies, the societies for the prevention of cruelty to animals and children, the game laws and the fish laws, the anti-vivisection and anti-vaccination societies, and all those institutions, too numerous to mention in detail, for the protection and preservation of the helpless and unfortunate, be they cats or dogs, or horses or human beings, irrespective of color, sex, sect or previous condition.

In such an atmosphere of benevolence the thoughts with which we commenced to write are temporarily asphyxiated, and, without denying their fundamental cogency, we recognize the necessity of an outlet for the benevolent impulses of this altruistic age.

Objects must be found for our charity, and if only could be combined with it a more or less complete recognition of the truths of sociology and medical science, harmony would be restored to our conflicting emotions.

We saw lately an attempt at such reconciliation, and, as it was made in a foreign country, it is probable that it will be tried here; indeed, from certain indications occasionally met with, we are not sure but that it has been kept in view, if not actually copied, in some parts of our own country. In the province of Venetia (Italy) the altruistic feelings of private benefactors and of communities find vent in annual donations of \$3,000,000 to several foundling hospitals, to which the three million inhabitants contribute about 140,000 infants annually, the vast majority of whom are illegitimate. Only about 48 per cent. of the "fittest" of these survive. Want of proper nourishment and neglect of all kinds are useful in producing this result here, as similar agencies elsewhere, employed by Nature untrammelled. In Naples a somewhat more rigorous application of Nature's laws left three survivors out of 656 admitted in two years.

In our own country some might point to the conditions existing in the convict camps in several of the Southern States as an instance of plagiarism, but aside from the fact that the Italian

method could hardly have been known to the originators of this contract system, we must object that the money paid to the State by the contractors can hardly be looked upon as the result of altruistic impulses, while the cruelty and hardships inflicted do not seem to be prompted solely by a desire to assist Nature in eliminating the unfitted, although that is their natural and inevitable consequence. With greater reason could the reports of our almshouses and public hospitals be pointed to as showing quite creditable efforts in this direction. Here, however, experimentation, medical and surgical, takes the place of the cruder "want of nourishment and neglect of all kinds" of the Italian school, but with very nearly the same result. The American genius is never content to be a servile imitator, and hence some such variation would be expected. This method, in our judgment, is superior to the other. It is more easily reconcilable with the sentiment of the times, being strictly scientific, and able to point more directly to possible good to result. It corresponds, too, to Nature's method in evolution, where, by an infinite number of experiments, she has gradually evolved results well nigh perfection. It is the only method which can hope to find favor here in America, but even here it must be pursued with circumspection and a gentle consideration for the untrained sensibilities of the public. These sensibilities are indigenous, we know, but are likely to be encouraged by English influences. The *Daily Chronicle* (London) recently found fault with some experiments made in the Johns Hopkins Hospital of Baltimore upon eight (8) lunatics with thyroid extract, although only one (1) resulted fatally. The influence of English sentimentality can also be traced in the anti-vaccination and anti-vivisection movements, and we are afraid that we cannot look for much relief in this respect from the Dingley tariff. We can only hope that the next century may see a clearer and more practical definition given to the radiant nebulousity of Altruism.

A HINT.

WITH proper limitations we are justified in taking the results of curative experimenting with a drug, in the old school,

as indications for our own scientific application of the law of similars in the use of the same drug.

The late experience of Dr. Hessler, of the Northern Indiana Hospital for Insane, furnishes us with an interesting proving of the thyroid extract, which may be of value to us in the homœopathic treatment of a usually intractable disease. He has reported a case of catalepsy treated with large doses of desiccated thyroid gland. The effect of increasing the doses was a gradual improvement in a condition which had lasted more than three years, so that the patient became able to speak and to walk. When the dose of seventy-five grains a day was reached, symptoms of exophthalmic goitre developed, which compelled the temporary discontinuance of the remedy. After a few days the catalepsy returned, and the treatment was again resumed with the same results, namely, the disappearance of the cataleptic symptoms and the return of the exophthalmic goitre. The latter, thus artificially produced, had all the characteristics of the true disease with the exception that there was no glandular enlargement, and that the symptoms disappeared whenever the dose of the drug was diminished or discontinued.

Besides the valuable confirmation hereby given to the theory that Basedow's disease is the result of over-activity of the thyroid gland, we have in it an indication for its homœopathic use in this disease. We could hope to use the desiccated thyroid gland in attenuated form with success in those cases where the glandular enlargement is not a prominent feature, although this latter may not prove to be a characteristic, since the use of the drug was discontinued before it had had time to produce this symptom.

We acknowledge that this is by no means a "pure" proving, such as those to which we look forward in the near "by and by," but how many of those by which we are guided in our daily practice are of that kind?

CONIUM is indicated in induration and enlargement of the ovary, attended with nausea, vomiting, eructations of wind; lancinating pains; acrid, white and slimy leucorrhœa; labor-like contractions; pains in the iliac region.

GLEANINGS.

THE MEDICAL TREATMENT OF GOITRE.—In view of the inefficiency of medical agents in the treatment of simple goitre, this affection came gradually to be recognized as a surgical disease. Yet while numerous cases have been cured or greatly improved by surgical measures, the various operations employed are attended with more or less risk to life even in the hands of expert operators, and are sometimes followed by serious sequelæ, as operative myxœdema. The demonstration of the fact that many of these cases can be ameliorated, or even cured, by thyroid feeding has again given an impetus to the medical treatment of goitre. As the thyroid preparations in use, however, vary greatly in their content of active ingredient, the results derived from their administration have lacked uniformity. Now that the active principle of the thyroid gland has been isolated by Prof. Baumann, and presented to the profession in the form of a trituration with sugar of milk under the name of iodothyrene, it will be possible to obtain the full advantages of the thyroid treatment. The following case reported by Prof. Bernays, of St. Louis, in the *International Journal of Surgery*, serves well to illustrate the value of iodothyrene in cases of goitre:

"The patient, a lady nearly forty years of age, has had a goitre ever since her maturity. It was treated in Germany by Prof. H. Lossen with parenchymatous injections of alcohol. The enlargement seemed to get a little smaller after about 30 injections. The goitre never disappeared entirely, but at times was larger. The last summer was spent by the patient on the Pacific coast, and she noticed a decided, very disfiguring and alarming increase of its size soon after her return to St. Louis. I decided to try some form of thyroid therapy, and selected iodothyrene, the active principle of the thyroid gland of the sheep. I began by giving 0.5 gm. per day, and increased to 1.0 gm. per day, which was continued for nearly two months. The patient is much gratified with the result, and says her neck is smaller than ever. The fact that the swelling decreased in size was accurately ascertained by the lady by a series of careful measurements of the circumference of the neck."

CHRONIC RHEUMATISM.—In the treatment of cases of chronic rheumatism the resources at the disposal of the physician still leave much to be desired. To be sure a large number of drugs have been suggested from time to time, but the majority has either proved ineffective or has exercised only a palliative effect. Of course much can be done in these cases by regulation of the diet, proper exercise, and especially change of climate, etc., but the latter is available to comparatively few patients. Among the symptoms chiefly complained of are the stiffness and pains in the affected joints and the disfiguring articular enlargement, due in great part to uratic concretions. It is sometimes possible to relieve the pains and stiffness in the joints by anodyne embrocations, massage, electricity, etc., but these measures cannot affect any perma-

ment improvement of the disease unless employed in conjunction with some remedy which will neutralize the *materia morbi* and thereby prevent the occurrence of subacute attacks, each of which is followed by an increase of the articular deformity and impairment. Dr. W. E. Anthony, of Providence, R. I. (*New England Medical Monthly*), believes he has found this remedy in lycetol, an alkaline derivative of piperazine, the well-known uric acid solvent. In a case of chronic rheumatic arthritis in which he employed this drug during an exacerbation, he noted that the quantity of urates in the urine was greatly increased, and coincidently with this the dull steady pains in the joints and the grating sounds produced by movements subsided and the attack was promptly relieved.

In the case of an old woman suffering from chronic rheumatism and living under very unfavorable hygienic conditions, lycetol also effected marked improvement. Dr. Anthony especially comments upon the prompt action of lycetol as a diuretic and uric acid solvent. After the acute exacerbation has been relieved, however, the remedy should be continued in smaller doses for some time, so as to secure a permanent curative result.

THE VALUE OF HOT SALINE IRRIGATION OF THE INTESTINES IN CASES OF URÆMIA.—Grandin states that he has seen cases where, after delivery of the fœtus or after an abdominal operation, the kidneys refused to functionate, and where, with absolute certainty, uræmic symptoms would supervene unless the excretory organs could be persuaded to do their duty anew. Acute suppression of urine to a greater or less degree, headache, spots before the eyes, clouding of the intellect, twitching—symptoms always of such bad omen—such is the clinical picture he has in mind, and for which he recommends, above the administration of drugs, continuous irrigation of the bowel with hot normal saline solution. While the catharsis which is indicated is awaited, while the problematical effect of one or another drug is hoped for, the intestine may be irrigated, with the result of most profuse diaphoresis and, in the relief of the congestion of the kidneys, the betterment of all the alarming symptoms. In the cases under consideration, what we aim to secure is free catharsis and diaphoresis, with consequent abstraction from the circulation of the toxic elements which are at the bottom of the alarming symptomatology. The physician is dealing with a complication which must either be relieved speedily or, as a rule, eclampsia, coma and death ensue.

To irrigate the bowel properly he proceeds as follows: The woman is placed in the left lateral position, with buttocks elevated and head lowered. A large rectal tube is inserted into the bowel as far as may be, usually up to the sigmoid flexure. The rectal tube is connected with a gravity syringe, which is hung at least six feet above the patient's head. In case such a syringe be not at hand, the physician will find a funnel in every household, and this may be connected with the rectal tube by means of rubber tubings. Hot salt water is used for irrigation. The strength of the solution should be about 1 per cent., and the temperature of the water in the receiver about 188° F. An attendant should hold the rectal tube at the anal margin to prevent its being expelled as, under the provoked peristalsis, the water is driven out of the bowel. From eight to ten gallons of water should be allowed to flow in. This accomplished, the woman should be wrapped in blankets and made comfortable in bed. Meantime, croton oil may be placed on the tongue, and glonoin may be

administered in full doses hypodermically in the event of the character of the pulse demanding it. It may be stated here that as a rule in the condition under consideration glonoin is called for, but the dosage must be large; that is to say, fully one-twenty-fifth of a grain, repeated half-hourly until the physiological effect has been secured. This drug offers us the readiest of all means for relaxing the spasm of the renal capillaries.

Very soon after the irrigation, profuse diaphoresis sets in, followed by abatement of the alarming symptoms, and shortly thereafter the kidneys may begin to excrete again. The explanation of the effect of hot saline rectal irrigation is not far to seek. The nerve centres are stimulated; the skin is called into action; peristalsis of the intestinal tract is evoked; in short, every indication is promptly met.—*A. M. S. Bulletin*, September 26, 1896.

F. MORTIMER LAWRENCE, M.D.

THREE CASES OF GANGRENE OF THE EXTREMITIES IN YOUNG AND MIDDLE-AGED PEOPLE.—Dr. H. Gotard (Poland) records three cases in patients of twenty-seven to forty-six years of age where gangrene developed spontaneously. In all three the course was similar. At first there were violent pains at a point most removed from the vascular centre, as the fingers or toes, when an ulcer would appear to become the point of departure of the gangrene. Though healing might follow in the stump after amputation, gangrene of the remainder of the limb would often follow, so that a second operation would become necessary. Or the same process might set in in another and distant extremity, so that in time the patient would only possess portions of his former extremities. In one subject a hard chancre was admitted, and microscopically endarteritis obliterans was noticed, so that in the other two the writer is inclined to regard the disease as of syphilitic origin.—*Przegląd Chirurgiczny*, Tom. iii, Zeszyt 3, 1897.

VESICAL AND RENAL HÆMATURIA.—Prof. Guyon (Paris), dividing hæmaturia into these two classes, first points out that the hæmorrhage may be of purely mechanical origin, as from catheterization or lesions of the pelvis and abdomen; those from calculi come under this heading, but they are usually scanty, improved by rest and aggravated by movement. It may even persist after lithotripsy.

Vesical hæmaturia may be dependent on a cystitis which, though not profuse, may by its persistence bring out a veritable anæmia.

Retention of urine may cause hæmaturia, though rarely is it abundant. Sudden evacuation may be followed by filling of the bladder by liquid and clotted blood, so as to necessitate extraction by aspiration.

Ulcers of whatever character never produce copious hæmorrhages except that they involve a good-sized vessel.

Tumors are usually the cause of *abundant vesical hæmorrhage*, and especially those which project into the vesical cavity—called cavitory neoplasms, by Guyon, as contradistinguished from those infiltrating the vesical walls (parietal tumors). The parietal variety rarely give rise to profuse hæmorrhage, even if much ulcerated. With the cavitory growths the hæmaturia is due to congestion, and not to ulceration.

Renal hæmaturia is copious with tumors of the kidney, and though it generally appears late in the disease it may be very intense, filling the bladder

rapidly with what seems to be pure blood. It may disappear as rapidly as it appeared and reappear at irregular intervals.

Nephritis may be associated with a scanty hæmaturia.

Renal calculi is another cause.

Tuberculosis of the kidney may be accompanied with hæmaturia, though one is not justified in diagnosing tuberculosis whenever the anatomical cause of the hæmorrhage is unknown.

Finally, there are cases of renal hæmaturia where neither tuberculosis, cancer nor calculi are to be detected at the necropsy, and where either hæmophilia or an excess of tension in the parenchyma of the kidneys with a tight capsule is possibly the cause.

There is a great similarity between the kidney and bladder as to the liability to congestion, though in the former a congestion may occur without any important lesion, while in the latter, with hæmaturia, either a profound functional disturbance or an important and serious anatomical lesion is present.—*La Settimana Medica*, No. 24, 1897.

AORTIC INSUFFICIENCY.—Prof. Jaccoud (Paris) begins with enumerating the symptoms of aortic insufficiency: notable hypertrophy of the left ventricle, downward displacement of the apex to the sixth intercostal space or farther and externally to the mammillary line. After a few years the hypertrophy may extend to the right ventricle, giving rise to the “*cor bovinum*” of the older writers, and later, dilatation sets in. The arteries beat very forcibly and tumultuously; the radial pulse is full, sudden, like a spring suddenly uncoiling, while during the diastole it becomes soft and disappears under the finger—the water-hammer pulse of Corrigan. Stethoscopically, there is a diastolic murmur, which generally is soft, though it may be hard, sharp and prolonged. Its point of greatest intensity is at the right border of the sternum at the second intercostal space, though later, when the heart is greatly hypertrophied, it may be over the sternum, or even on the left side. Over the carotids and femoral arteries a double murmur is to be heard; in *tricuspid insufficiency* a similar murmur will be audible in the femoral vein which is not to be confounded with that of aortic insufficiency.

If the aortic incompetency be but partial, Corrigan's pulse will be little pronounced. If coexisting with another lesion the symptoms will be attenuated, especially the peripheric circulatory symptoms. With associated mitral stenosis the characteristic pulse will be less noticeable or wanting, and the second vascular murmur inaudible; with aortic stenosis the peculiar pulse will also be lacking, and the second murmur decreased or absent.

Compensation of aortic insufficiency may be complete and only be affected by overexertion, cold and dietetic errors, yet with the course of years it will be interrupted by a (fatty) degeneration of the myocardium on account of the heart-muscle not receiving blood enough during the diastole.

Sudden death is not rare in this cardiac affection, either from bulbar ischæmia or cessation of the organ during effort. Diastolic murmur of the aortic orifice is *not* pathognomic of aortic insufficiency, for it may be due to dilatation of that valve so that the valve leaflets no longer fully meet in closing. Here the prognosis is much better. This is also noticed in symphysis of the pericardium, in great hypertrophy of the left ventricle, etc. On the contrary, the diastolic souffle may be absent when the insufficiency is small, and when

there is lowering of the blood-pressure, either constant or temporary.—*La Settimana Medica*, No. 24, 1897. Osler, *Practice of Medicine*, 1st ed., p. 602, says that the aortic insufficiency arises from inability of the valve segments to close an abnormally large orifice, or more commonly from disease of the segments themselves. I have found it well to remember that a valvular heart lesion may be due to a dilated orifice as well as to affections of the segments themselves. Osler was in the habit, in his lectures, of referring to these patients having worshipped at the shrines of Bacchus and Venus, and not a few at that of Venus.

FRANK H. PRITCHARD, M.D.

GASTRO-INTESTINAL AND HEPATIC RELATIONS OF GOUT.—Dr. Charles G. Stockton, in a paper read before the American Medical Association, draws the following conclusions :

First.—That gout is a definite disease, to which certain individuals are predisposed, but which depends for its development upon causes largely unknown.

Second.—That laziness, a full nitrogenous diet, and the use of fermented liquors predispose to the disease.

Third.—That so-called lithæmia, as the term is popularly applied, is not gout, but an auto-intoxication depending upon gastro-intestinal and hepatic derangements.

Fourth.—That the diet in gout should be largely free from nitrogenous substances.

Fifth.—That the diet in lithæmia must be ascertained by the careful study of the primary digestion, the urine, and the general health of the patient, but a nitrogenous diet is often the most satisfactory one.—*Virginia Medical Semi-Monthly*.

TREATMENT OF CIRCUMSCRIBED PELVIC HÆMORRHIAGE.—(Dr. M. Rosenwasser.) The author's experience, as told to the Section of Obstetrics and Diseases of Women of the American Medical Association, leads to the following conclusions :

1. That unless they require immediate operation for cause when first seen, they can be submitted to careful supervision in hospital or home without danger.

2. That when thus watched, more than one-half will get well without operations by keeping them at absolute rest for a period of six to eight weeks.

3. That when they cannot be watched, or refuse to rest, early operation is to be urgently recommended.

4. That operation is necessary only for special indications, of which the most important are sepsis with or without suppuration, recurrent hæmorrhage, growth of tumor, non-absorption after a considerable time, and compression of the pelvic viscera (rectum or ureter).—*Virginia Medical Semi-Monthly*.

AILMENTS OF VOICE USERS.—Dr. Horace Clark, in the *Buffalo Medical Journal* for July, gives a whole system of voice culture almost in a nutshell.

Rules for Breathing.—1. Diaphragm breathing. 2. Rib breathing. 3. Collar-bone breathing. Diaphragm and rib breathing constitute the right way ; collar-bone breathing is totally wrong.

Exercise No. 1.—1. Lie upon the back. 2. Inhale slowly through the nostrils. The abdomen will rise, the lower part of the chest will expand side-

ways, and the upper part will be pushed forward. 3. Now hold the breath, not by closing the glottis, or voice-box, but by keeping the diaphragm down. 4. Count four at the rate of sixty per minute, and let the breath go *suddenly*. Increase the length of holding the breath two seconds per week, not exceeding twelve seconds as a maximum limit.

1. Inhale rapidly through the nostrils. 2. Do not hold the breath, but expire slowly and evenly. A test of successful expiration is to breathe against a candle-flame, which should not wave to and fro, but be blown steadily away.

1. Inspire slowly. 2. Expire slowly.

Voice Fatigue.—Have plenty of breath and have it under control. Commence to expire only when the vocal cords are to be set in vibration. Never use the voice when there is indication of its impairment. Do not exhaust all the air taken in at one inspiration before beginning another.

Attack.—Exercise No. 2.—1. In the pitch of the spoken voice sing the combinations oo, ah, ai, ee, and follow each one by a short inspiration. In this exercise avoid two things. 1. Glide. 2. Click of the glottis. This is done as follows: Pronounce the word *up*, vigorously. 2. Whisper the vowel *u* as pronounced in *up*, then sing *ah*.

Resonance.—Exercise No. 3.—1. Arrange a mirror so that all the parts can be readily seen. 2. Open the mouth as widely as possible in every direction. 3. Look at the tongue, the soft palate, and the back of the throat. 4. Close the mouth again, and repeat this procedure several times. 5. Open the mouth widely enough to put two fingers between the teeth; then smile, so as to draw the corners of the mouth sideways until they are each bordered by a perpendicular line. Now suddenly pucker the lips as if to whistle. 6. Smile with the lips firmly closed, drawing the corners of the mouth sideways as much as possible; then pucker the lips as if to whistle but leave no aperture.

Control of the Tongue.—Exercise No. 4.—1. Open the mouth wide. Put out the tongue as far as possible. Draw it back quickly and try to make it lie flat and without tremor, touching the teeth all around, and especially the back teeth. 2. Put the tip of the tongue against the lower front teeth and push it out as far as possible. Then draw it back quickly as in the first exercise. 3. Keep the root of the tongue flat; raise the tip and push it perpendicularly and slowly against the roof of the mouth. Gradually lower it again until it assumes the original position. 4. Raise the tip of the tongue as in 3, and move it gradually from side to side so that its highest point will describe a semicircle.

Gymnastics of the Soft Palate.—Exercise No. 5.—1. Breathe through the mouth; the soft palate will be moderately raised, the uvula retaining its normal shape and position. 2. Open the mouth again and try to breathe through the nose. The soft palate will fall and the tongue will raise a little. Exhale in the same way and the mouth will shut at the back. 3. Inhale through the nostrils, the mouth being wide open. Prevent the tongue from rising. The soft palate will now come down more firmly. Exhale through the mouth and the soft palate will rise again.

These exercises greatly strengthen the muscles of the soft palate and the benefit to the voice is incalculable.—*Buffalo Medical Journal*.

AFTER-TREATMENT OF CATARACT, WITH ESPECIAL REFERENCE TO THE USE OF GERMICIDES.—Dr. Joseph A. White, in a paper read before the American

Medical Association, said: "I have for some years been in the habit of using sterilized vaseline before and after the operation. The vaseline is boiled ten minutes, and to each ounce is added one-sixth grain bichloride mercury and an equal quantity chloride sodium, well rubbed in whilst it is cooling. Twenty-four hours before the operation the eye is washed with a sublimate solution, 1 : 5000, filled with the vaseline and sealed with antiseptic dressing. During the operation the eye is flushed with bichloride, 1 : 5000, and as soon as it is completed it is filled with the sterilized vaseline, the lids closed with a pledget of absorbent cotton or gauze, wet with sublimate solution."—*Virginia Medical Semi-Monthly*.

F. WALTER BRIERLY, M.D.

A RELIABLE AND HARMLESS WAY TO DIMINISH AND CURE OVER-FATNESS.—Dr. William T. Cathell, Baltimore, Md., in an interesting article, outlines the following plan for the treatment of the above condition. He advises the patient to drink a large glassful of artificial Kissingen water twenty minutes after each meal, to be followed the next day by a similar amount of artificial Vichy water. A persistent use of these waters day after day, for weeks, will produce a wonderful change in the weight of the person taking them. While using them, the patient should keep tally on his girth and weight by taking his measures and by carefully weighing his body in the same clothes and on the same scales. If he has lost a couple of pounds for each week, take a smaller glass of each at every drink; and if he has lost less than a couple of pounds for each week, squeeze a few teaspoonfuls of lemon-juice into each glass of Kissingen to increase its acidity, and also add one teaspoonful of aromatic spirits of ammonia to each glass of Vichy to increase its alkalinity. The patient should also use less starches, sugars, fats and alcoholics; use neither food nor alcoholics except at regular meals. Take moderate exercise.—*Dietetic and Hygienic Gazette*.

DOES RIDING THE BICYCLE CAUSE ENLARGEMENT OF THE PROSTATE GLAND?—Dr. G. H. Patchen, New York, after reviewing the arguments advanced pro and con upon this subject, and dwelling particularly upon prostatic troubles caused by the abuse of the sexual act, arrives at the following conclusions:

1. That prostatic enlargement is not a necessary and much-to-be-dreaded inheritance of old age, but is the direct result of violated law—the penalty imposed by nature for excessive sexual activity. The reasons for its appearance after middle life are that a considerable period of time is required for its development, and that the diminishing vitality of advancing years is not sufficient to check or turn aside the tide of nutrition which evil habit has established and kept so long flowing toward it.

2. That there is nothing about the construction or use of the bicycle which will injure either the functional or organic condition of the prostate, because, by its power to promote and cultivate abdominal respiratory rhythm, it is supplied with a perfect antidote to all such evil tendencies.

3. That no man, of whatever age, whose prostate has not been organically deranged by sexual excess in some of its various forms, need hesitate to take up the bicycle as a wholesome and health-giving means of outdoor exercise.

4. That, for reasons already mentioned, the bicycle may be used as an auxiliary curative measure by all sufferers from prostatic enlargement, provided, always, the real cause of the disease is not allowed to assert itself.—*Dietetic and Hygienic Gazette*.

W. D. CARTER, M.D.

SURGICAL HINTS.—It is better to have too many assistants than too few.

A paronychia, or "run around," rarely demands incision. Daily wet dressings with firm gauze packing between the nail and skin will usually effect a cure. The first packing hurts, the others as a rule do not.

In an emergency operation, if you happen to be without operating gowns, remember that a newly washed night-shirt will serve quite well. It is far cleaner than one's external clothing, and will protect the patient against the accidental contact of instruments or ligatures with one's surgically unclean shirt or trousers.

A patient with anal fissure should be instructed to smear the orifice inside and out, as well as he can, with vaseline before each movement of the bowels. This will in great measure prevent feces from clinging to the parts in passing, and will also greatly facilitate the passage of the stool. Do not advise such a patient to use glycerine locally.

If you happen upon a recent compound fracture where the end of the bone still protrudes through the opening which it has made in the skin, take every precaution that this end may not slip back until it has been thoroughly disinfected. In many instances it is safer to scrub and clean the surrounding parts, and then, after forcing the fragment a little farther through, to cut it off. When this has been done the fracture may be reduced with a fair prospect of aseptic healing.

Fissure of the anus usually gives rise to intense pain, which often lasts many hours after stool. This may be greatly alleviated by inserting a very narrow slip of moist gauze with a flat probe, so that the gauze lies against the raw surface of the fissure. It gives the same relief that is experienced when a light packing is placed between the skin and the nail in cases of so-called ingrowing toe-nail, and for the same reason, viz., it prevents inflamed tissues from touching each other and drains away irritating wound secretion. Iodoformized gauze is best, because of the local anæsthetic action of the drug.

In wounds of the face, where the patient objects to suturing, good coaptation and primary union can frequently be secured by the following plan: narrow strips of gauze are fastened to one edge of the wound by ordinary collodion, and, after sufficient traction has been made to approximate the margins, fastened to the other edge in the same manner.

Corns may be cured. Apply a wet dressing, covered with oiled silk or rubber tissue, every night. In the morning remove with the finger-nail as much epidermis as will easily come away, and during the day apply a pledget of cotton impregnated with vaseline, covering it in with a patch of adhesive plaster. The *clavus* will gradually disappear in nearly all cases, though the treatment may have to be kept up for a month or two.

Bichloride of mercury should never be used for dressing extensive raw surfaces, and sublimate solutions should always be avoided for the irrigation of deep wounds and cavities. Its employment has frequently resulted in the appearance of a true toxic enteritis, which has, in more than one instance, been followed by death. In the patients who recover there is often a long convalescence, with continued intestinal disturbance.

Carbuncle of the lips causes severe and dangerous constitutional disturbance, and requires ample incision for drainage. An unsightly scar may be avoided by splitting the lip along the junction of the skin with the vermilion border, without regard to the location of any little pustular "heads" which may be present. The incision along this border-line may be very extensive, and

must reach healthy tissue, passing through all induration. Gauze should be placed in the incision between the two flaps and a soaking dressing applied. The symptoms will usually soon be relieved, and the scar resulting from the apparently enormous wound will be insignificant.—*International Journal of Surgery*.

A MIXTURE OF CASTOR OIL AND BALSAM OF PERU AS A SURGICAL DRESSING.—This was first proposed by Van Arsdale (New York) in June, 1893, and gleaned in the *Hahnemannian Monthly* at that time. Following is the formula:

R. Balsam of Peru, m xxx;
Oleum ricini, oz. j.

The mixture is viscid enough to remain for any length of time in direct contact with the wound, not spreading beyond those portions of the dressing on which it is originally poured. The castor oil remains sweet when mixed with balsam of Peru, and the mixture will keep any length of time.

Any powder can be dusted on the ulcer or granulating surface in special cases; the oil will not interfere with its remedial action, but will prevent drying and scabbing. The disagreeable odor of iodoform is very much modified when used with this dressing. Balsam of Peru is too irritating to the skin when applied in a mixture of more than 10 per cent.

The following advantages are claimed to attend the use of this balsam oil:

As long as there is any secretion the oil in this mixture prevents surface union, or closure of the gap, when an incision has been made, thus preventing any accumulation of blood or serum in the depths of the wound. Dry gauze, like a dry sponge, will not take up fluids as readily as when previously moistened. As the dressing remains moist and does not dry there can be no scabbing. The sponge-like action is *continuous* and no reaccumulation of discharge can take place. "The oily mixture *saturates the fibres* of the gauze and the secretions are drawn into the interstices" until the whole dressing is completely saturated. It is therefore important to apply, directly over the opening, a relatively large quantity of gauze. Immediate removal of secretion from the depths of the abscess facilitates rapid contraction of its cavity and aids *healing from the bottom*.

For the application of the dressing a bunch of plain or sterilized absorbent gauze is spread with the balsam oil over an area somewhat larger than the wound to be dressed, the amount varying according to the size of the dressing and the period during which the dressing is to remain in place. The mixture should permeate the first four to six layers of gauze. The gauze is then laid over the opening so that the oil comes in direct contact with the skin, and is then covered with a protective layer of gutta-percha tissue, oiled silk, oiled muslin, or paraffin paper, large enough to cover in all the gauze, and is then secured in place by a bandage; this constitutes the "balsam-oil dressing." Neither the castor oil, balsam of Peru, nor the gauze need be sterilized.

Packing abscess cavities is not to be resorted to, as it interferes with rapid contraction, keeps the interior moist, and by its irritation as a foreign body mechanically increases the amount of secretion.

Powdered bismuth subiodide (red) was extensively used by Van Arsdale as a mild astringent, and silver-nitrate stick as a caustic, when cases presented with weak or excessive granulations.

The advantages of the balsam-oil dressing may be summarized as follows:

1. *Continuous Drainage*.—It affords a continuous sponge-like absorption of the discharge to the point of saturation, so that the ulcer or abscess is kept clean and dry. Under these conditions :

2. *Retention* cannot take place, there can be no scabbing, no pain, no redness, no swelling ; and if these are present, all subside in a short time after the first dressing is applied.

3. *Bacterial growth* is reduced to a minimum, the production of ptomaines practically ceases, and, as they are not under pressure but at once soaked up into the dressing, no lymphangitis or systemic absorption can take place, and no fever be present.

4. *Epithelial growth* goes on more rapidly than under any other dressing.

5. *No eczema* occurs around the margins of ulcers, owing to its clean and dry condition, and there is an entire absence of the irritation met with when antiseptic dressings are used.

6. *Removal is painless* and bleeding does not occur, as the dressing does not adhere to the granulations. This bleeding is a too often overlooked source of infection.

7. *Granulations* are never profuse, and quickly shrink after the dressing is properly applied.

8. *Infrequent Dressings*.—It need not be changed, on an average, oftener than twice a week.

9. *Irrigation, disinfection*, or scraping of abscess cavities may be avoided.

The dressing does not actively prevent suppuration ; it simply drains the wounds and keeps them in a clean condition.—*Annals of Surg.*

HERBERT L. NORTHROP, M.D.

REMARKS UPON CANCER OF THE UTERUS, BASED UPON A PERSONAL EXPERIENCE OF NINETY-SEVEN HYSTERECTOMIES, WITH ONLY FOUR KNOWN AND EIGHT SUSPECTED RECURRENCES.—Dr. Emory Lanphear, St. Louis, Mo., under the above title relates his experience and cites a number of cases :

Total number of hysterectomies, 97.

Cases that have lived more than five years, 8.

Cases that have lived more than three years, but less than five years, 22.

Cases that died from operation or very soon after, 14.

Cases of known recurrence, 4.

Cases of suspected recurrence (not verified), 8.

Cases still within the danger period or lost sight of after two or three years, 41.

From his observations he has reached the conclusion that the attending physician should base his advice to patients regarding operation upon the following rules. Radical operation is indicated :

1. As soon as a diagnosis of carcinoma of the cervix is made—provided the disease is not too far advanced for any possible benefit at the time of first examination.

2. Whenever there is a fungus growth upon the cervix (especially in a patient near the menopause) which persists in spite of treatment, even though there is no ulceration and but little tendency to spread. It is probably the papillary form of carcinoma cervicis, and there is always involvement of the mucous membrane of the body, so that high amputation will not cure.

3. When there are one or more nodules in the mucous membrane of the

cervix, which soon ulcerate and destroy the mucosa. Such trouble is almost always the nodular variety of carcinoma of the cervix.

4. When there is an infiltrate in or beneath the cervical mucous membrane, just within the os, which soon breaks down and destroys the cervix by erosion. It constitutes the variety known as cancer of the cervical mucous membrane, and may have progressed far before the os shows any marked change when viewed through the speculum.

5. When there is evidence of the existence of cancer of the forenchyma of the uterus, even if the cervix seems to be perfectly normal. Such cases are not rare.

6. Whenever the glandular endometritis becomes inveterate, showing a tendency to degenerate into a typical malignant adenoma at the menopause, as indicated by (a) the appearance of irregular hæmorrhages; (b) the presence of a serous, reddish, odorous discharge; and (c) paroxysmal pain.

7. In all cases where there is even a strong suspicion of malignant disease. In early operation lies safety. I have removed a number of wombs on the mere suspicion of cancer, and the microscope has shown the justifiability of the operation in all but one case. I can quite agree with Pozzi that "it may even happen that as a last resort against persistent hæmorrhage alone we are obliged to perform vaginal hysterectomy with only the diagnosis of probable cancer."

When Operation is not Indicated.—Hysterectomy should not be performed under the following conditions:

1. Whenever the disease is so far advanced that the uterus is fixed in the pelvis.

2. Whenever it is certain there is extensive cancerous infiltrate in the broad ligament.

3. Whenever the cancer involves the bladder.

Implication of the posterior vaginal wall or even of the anterior part of the rectum is not necessarily a positive contraindication to operation. (In one of my cases, above noted, it was necessary to remove at least three inches of the vagina and some of the anterior wall of the rectum; yet the woman is still alive at the end of four years.)

4. When the "cancerous cachexia" has become pronounced.

5. When the patient is too weak from repeated, exhausting hæmorrhages.

6. Whenever the diagnosis of sarcoma of the uterus is quite certain. Such cases always recur after removal and die quickly.

When Palliative Operation Should be Advised.—Operations less severe than extirpation of the uterus, such as curettage, burning with Paquelin cautery, etc., are indicated frequently where cases are too far advanced for the hope of cure; especially as follows:

1. When there is marked sepsis, removal of the sloughing mass with the sharp curette and the subsequent use of douches of solution of permanganate of potash followed by insufflations of pyoktannin will greatly prolong life.

2. When there is excessive hæmorrhage. In such cases curettage followed by cauterization and the after-treatment just mentioned will be of much benefit.

3. When pain is very severe. Even hysterectomy as a mere palliative measure is sometimes advisable, the pain being much less marked in recurring carcinoma in the pelvis.—*International Journal of Surgery*, August, 1897.

W. D. CARTER, M.D.

MONTHLY RETROSPECT

OF HOMŒOPATHIC MATERIA MEDICA AND
THERAPEUTICS.

MERCURIUS BINIODATUS IN ASTHMA.—Ord, of Bournemouth, recalls the fact that some time ago a friend mentioned that he seldom failed to relieve or cut short a paroxysm of asthma by repeated small doses of merc. bin. 3x. While there is no obvious similarity between drug effect and disease, he has in practice found the hint of value, and in his hands it has repeatedly relieved severe attacks of spasmodic asthma, especially when given early in the paroxysm. Moreover, by giving a rather large dose (3 grains of the 2x trit.) at bedtime, the usual nightly attack in chronic sufferers may be averted. It would be difficult to ascribe this action of merc. bin. to pure homœopathy, but Ord finds its explanation in Haig's uric acid theory. According to that observer, the asthmatic paroxysm is due to nature's attempt to rid the system of stores of uric acid that have been accumulating from food and elsewhere, for which purpose she periodically pours their overplus into the general circulation for elimination by the kidneys. The temporary presence of this poisonous amount of uric acid in the systemic circulation produces vaso-motor paroxysm, with contraction of the arterial capillaries generally, but most markedly in any organ which is constitutionally weak or overworked. Hence by contraction of the capillaries of the lungs in asthmatics the attack is produced. In other constitutions a "uric acid storm" will exhibit itself in different ways—in brain-workers by a severe headache, in others by bilious attacks, or influenzal catarrhs, or even bronchitis or acute rheumatism.

It has been found that mercury and its salts, especially the iodides, tend to prevent this flow of uric acid from the liver, spleen, etc., into the circulation, and indeed render the blood unable to hold in solution a large quantity of uric acid and its salts. Chemically, mercury combines with urates to form an insoluble colloid substance which is inert, but it is doubtful whether these laboratory experiments represent correctly what occurs in the body. This fact, then, gives an explanation of the beneficial effect of merc. bin. in spasmodic asthma, since it clears the circulation of that poison which, by its contracting effect on the capillaries of the bronchioles, produces the distressing dyspnoea.

This action of mercury probably underlies the undoubtedly beneficial effects of a few grains of merc. dulcis (also of the old-school grain of calomel) in biliousness as well as at the outset of many acute affections. The fact that a far smaller dose than that our colleagues formerly believed in is now found sufficient for the purpose has not escaped the observation of Haig, who mentions that the necessary dose is usually much less than could possibly act chemically by combining with the uric acid, and suggests a comparison between the remedy and the percussion-cap that fires the gun, but does not

supply motive power to the bullet. So nature only requires a push in the right direction to effect a cure herself.—*Monthly Homœopathic Review*, September 1, 1897.

THE TREATMENT OF PERNICIOUS ANÆMIA.—Blackley devotes a post-graduate lecture at the London Homœopathic Hospital to a thorough discussion of pernicious anæmia. As to treatment, when called upon to take charge of a case of pernicious anæmia, the selection of suitable nourishment is our first and most difficult duty, owing to the repugnance to food which is usually present. Where solid food cannot be taken, milk in large quantity, even to the extent of four or five pints a day, is usually well tolerated, with raw eggs or meat juice sandwiched in between. If the patient can take solids without inconvenience, well-cooked meat, fish, vegetables reduced to a *puree*, cheese and fruit, may be given, with light ale, white wine, or small quantities of whiskey. If the patient can stand transportation, high mountain air is beneficial. In default of this, oxygen inhalations have, on occasion, been followed by good results.

In the matter of drug treatment, all who have written upon the subject are in accord upon one point, viz., that iron has no influence whatever upon the progress of pernicious anæmia; and the same must be said of phosphorus, which, upon the strength of the changes seen in the red corpuscles after phosphorus poisoning (poikilo- and micro-cystosis, fragmentation, etc.), has been frequently chosen as the appropriate remedy. A closer study of recent cases of poisoning at once suggests the reason of our want of success, for we find that instead of a diminution in the number of red corpuscles there is a marked increase, rising in cases recorded by Taussig and Limbeck as high as 8,650,000 and 7,900,000, respectively. Phosphorus is evidently not a simillimum. With arsenic, however, we are treading upon safer ground, as evidenced by a case treated in the hospital with Fowler's solution. By far the best results hitherto obtained in the treatment of pernicious anæmia have undoubtedly been due to the administration of arsenic; and it is satisfactory to think that we possess in this fact another striking instance of the confidence with which we may look to the law of similia in our daily needs, for we find that when arsenic in the shape of Fowler's solution is administered steadily to a healthy human subject, marked diminution in the percentage of red blood corpuscles and increase in that of hemoglobin are uniformly produced.

Next to arsenic in its power to induce anæmia stands lead; and if we may judge by the numerous and marked changes wrought in the blood by saturnine intoxication, we ought in plumbum to have another and powerful weapon in the fight with pernicious anæmia. These changes, which have been noticed by Hayem, Malassez, Limbeck and others, are as follows:

1. Red corpuscles, very much diminished in number.
2. Poikilocystosis and partial decoloration of some corpuscles.
3. Presence of large nucleated red corpuscles (megalo-blasts).
4. Hemoglobin percentage much diminished.

If to this list be added the characteristic appearance of the gastric mucous membrane, due to atrophy of gastric follicles, which has been repeatedly found *post-mortem* in cases of chronic saturnism (a condition in every way comparable to the atrophy and fatty degeneration of the mucous membrane lining

the digestive tract, a prominent feature of the pathological anatomy of pernicious anaemia), we may fairly infer that we have in lead not a mere *similia*, but almost a *similimum*.—*Monthly Homœopathic Review*, September 1, 1897.

ARNICA IN CHRONIC BRONCHITIS.—According to Ord, there is a peculiar and distressing symptom often met with in this disease, which it is perhaps not generally known may be promptly relieved by arnica. The subjects of chronic bronchitis, especially those whose arteries are degenerated, and when emphysema is present, on attempting to go out and walk a little after a winter's confinement, may experience a distressing pain in the chest. It is described as a "bruised weak aching," often called "great sensitiveness of the chest." It is not necessarily accompanied by an increase of cough or expectoration, and is situated over the sternum and the sterno-costal articulations. This pain may be partly muscular, but is chiefly caused by stretching of the sterno-costal articulations by increased efforts at respiration. After months of slow and feeble breathing in a chair or bed, during which the chest-walls have grown stiff from disuse, it is easy to understand the production of this symptom on attempts to go about. It is possible that this pain may also be caused by reflex efforts of the muscular elements in the bronchial tubes to expand them and so admit the extra air which the unwonted exercise demands. Whichever may be the true pathological explanation, a few doses of arnica in the 3x dilution will promptly remove it.—*Monthly Homœopathic Review*, September 1, 1897.

ARNICA IN VENOUS THROMBOSES.—Ord notes that the painful thromboses which occur in the course of a vein after a phlebitis are most generally treated by hamamelis or hazeline both internally and externally, and sometimes by pulsatilla or carduus marianus. Under these remedies progress is often slow and tedious, especially when, as often happens, the least movement or exposure precipitates a fresh attack. If now arnica be given internally, the blood-clots are dispersed with surprising rapidity, and the tendency to relapse will be counteracted. Two cases which the writer records substantiates this statement.

Although the provings of arnica show no instance of the drug having produced thrombi, its action in this disease is none the less strictly homœopathic, for we have abundant evidence of its action on the veins and the tendency it produces to extravasation of venous blood from the capillaries. The general disposition to hæmorrhages and the formation of blood-clot, clearly shown in the cases given in the *Cyclopædia of Drug Pathogenesis*, probably depends upon its selective action on that internal coat of the veins which is continued in the capillaries. The condition of this inner coating, when thrombi are found during a phlebitis, is probably precisely similar, only greater in degree, to that produced in the provers of arnica, who exhibited a tendency to venous capillary hæmorrhages. The effects of inflammation upon the inner coats of a vein are stagnation and clotting of the blood, whilst the walls of the venous capillaries, which are directly continuous and identical in structure with the inner lining of the larger bloodvessels, become so weakened as to rupture and permit an extravasation into the tissues. This latter process is probably identical with that produced by poisoning with arnica. The same drug in small doses has the effect of neutralizing this tendency. So, too, in blood ex-

travasated after an injury, arnica accelerates the natural recuperative powers of the part. It seems probable that this property of arnica is the prime cause of its value in the effects of injury, for all strains and blows produce some dissolution of continuity in delicate tissues, with consequent rupture of capillaries. From this result the usual appearances of bruising and subcutaneous hæmorrhage. Two well known examples of this action of arnica in absorbing blood-clot are found in its action on the uterus after parturition, and its beneficial effects immediately after cerebral hæmorrhages.—*Monthly Homœopathic Review*, September 1, 1897.

STROPHANTHUS IN URTICARIA AND ANÆMIA.—Ord has found strophanthus, in 5-drop doses of the 1x tincture, of more general value in urticaria than any other drug. Especially in the more chronic forms, when apis mel. and chlorhydrate 1x (his two previous favorites) have failed or only given temporary relief, strophanthus has promptly cured. When there is any accompanying cardiac weakness, especially with palpitation, this gives an additional indication for its use. He is now treating a lady who has had constant outbursts of urticarial rash dating from exposure to an offensive effluvium from a dead whale cast upon the sands six months ago. The attacks would also recur after drinking a glass of table beer. Since taking strophanthus for three weeks there has been no sign of a rash.

Strophanthus seems to have some specific action in anæmia of young women. Again and again he has seen cases in which iron had been given in vain, though in carefully selected forms, immediately and rapidly improve when strophanthus was given in alternation or in addition to the iron preparation. Whenever palpitation and breathlessness are marked features in such cases, he uses strophanthus, and rarely without good results. Whether these effects are due to the tonic action of the drug on the flagging cardiac muscle, or on the nervous system, in the absence of good provings it is impossible to say. He has not obtained such results from digitalis.—*Monthly Homœopathic Review*, September 1, 1897.

THE LIMITATIONS OF GYNÆCOLOGICAL THERAPEUTICS.—Wood, of Cleveland, in the sectional address on gynæcology presented to the American Institute of Homœopathy at its Buffalo meeting, discusses the limitations of therapeutics in the treatment of gynæcological diseases. He frankly admits that no hard-and-fast line can be drawn between the diseases amenable to internal medication and those which are not. We cannot be governed by gross pathological changes alone. Again, the power of drugs favorable to influence certain diseases must necessarily depend upon other factors than mere tissue changes. The impressionability of the patient must needs be taken into consideration, as well as her environment, her social status, and her habits of life. We know that certain organisms are infinitely more susceptible to drug influence than are others, just as some women are more profoundly impressed by local disease than are others. Other than accidental lesions, nearly all the diseases of the female pelvic organs are functional before becoming organic. During this period the diminished physiological resistance may be compensated for by the action of a properly selected remedy. For instance, that the homœopathic remedy is of inestimable value in dealing with the precursory symptoms of cancer there can be doubt, but that it has up to the present time cured a single authentic case of the disease there is the great-

est doubt. Its mission has to do largely with the correction of those purely functional changes which precede organic, and contending, in a purely palliative way, with the systemic disturbance incident to the later stages of the disease. He is aware that many cases of alleged cures of cancer by internal medication are reported, but a careful study of the literature of the subject can but convince the unbiased reader that in nearly every instance the certainty of diagnosis is to be questioned. Personally the author has not the slightest faith in the reported cures of ovarian cysts by internal medication. Nearly all the cases recorded have been reported by men whose reputation as abdominal surgeons has not been established, and a careful analysis of the cases forces the conviction that in no instance will either the cyst or the diagnosis hold water. None will dispute the efficacy of homœopathy in dealing with those conditions of the ovary—congestion, irritation and inflammation—which are responsible for adventitious growths of that organ; and possibly as our art approaches nearer to a state of perfection we may be able to cure ovarian cysts without the knife. Dr. Wood insists upon the necessity of surgical interference in dealing with pus confined to the pelvis. The surgical axiom that pus, wherever found, should be liberated by surgical measures is so firmly established as no longer to require emphasis.

The pelvic neuroses afford abundant opportunity for a wide range of opinion. More disappointments have followed operations for the relief of nervous symptoms than any other class of affections. Dr. Wood believes that clear and definite evidence connecting the neuroses with the sexual function should be had before the operation is justifiable.

It is suggested, in the light of the results obtained by serum-therapy, that perhaps we are not obtaining the best possible results from our homœopathic remedies by the present method of administration. We should not close our eyes to the results obtained by Coley in the treatment of sarcoma with the erysipelas and prodigiosis toxins, and the writer is inclined to believe that they have resulted because of the homœopathicity of the toxin to sarcoma. He questions whether it might not be advisable for our pharmacists to furnish us with non-alcoholic and sterile preparations to be selected strictly in accordance with the homœopathic law and applied directly to the seat of disease. It is, however, unfortunate that many of the "key-notes" relating to the female sexual organs found their way into our symptomatology through the provings of one Nœnning, who furnished our materia medica with something like eleven thousand symptoms whose reliability has been called into question by Hughes and others. In such a series of experiments as that suggested great care should be observed not to base the selection of the drug upon unreliable symptoms.—*Medical Era*, August, 1897.

CALOPTRIS GIGANTEA IN SYPHILIS.—Dr. E. M. Gramm, of Philadelphia, admits the desirability of the use of mercury in syphilis, and in dosage sufficient to bring the disease under rapid control and leave no possibility of further transmission. As the result of such dosage some symptoms show themselves which require the omission of the remedy until the toxic effects pass away. Formerly it was his custom to prescribe saccharum lactis during the period in which the mercurial symptoms were disappearing, but during the past year his attention was called to *caloptris gigantea*, an oriental member of the *Aselepiadaceæ*, as a remedy useful for symptoms such as appear

during this period. As a result the drug, in doses of a few drops of the mother tincture, was administered to a woman who had been undergoing a course of mercurialization and who presented slight salivation, enormous thickening of the free ends of her finger-nails, a papular eruption and other characteristic symptoms. The papular eruption had disappeared, but the other symptoms were becoming steadily worse. Under caloptris a steady and rapid improvement in all symptoms occurred.

Caloptris is official in the British Pharmacopæia and the United States Dispensatory. It is said by our own pharmacopæia to have been proved by Ivatts, of Dublin; but, unfortunately, Dr. Gramm has not been able to secure his record. The occurrence of a sense of heat he has noted in a number of instances, and the patients date their improvement from the time when they began to feel it in their stomachs. Dr. Gramm considers his own report a mere fragment, and anxiously awaits further investigation of the drug.—*Minneapolis Homœopathic Magazine*, August, 1897.

F. MORTIMER LAWRENCE, M.D.

OLD AND NEW ON OLEANDER.—Dr. Goullon (Weimar) cites Altschul to the effect that the sphere of action of oleander is as follows:

1. Painless paralyses (Hahnemann, Gross).
2. Loss of feeling and weakness of the whole body.
3. Seizures of fainting and loss of consciousness.
4. Cutaneous eruptions and crusta lactea.
5. Mental dulness and weakness of memory.
6. Lienteria (Hartmann).
7. Palpitation of purely nervous origin.
8. Paralysis of the lower extremities.

Puhlmann's *Handbuch* states this drug to be indicated in tachycardia and stenocardia, and dwells especially on its action on the nervous system. Hirschel, on the contrary, emphasizes its action as predominantly on the skin, and recommends it in afebrile chronic skin eruptions, vesicular and nodular eruptions and crusta lactea. The psychopathic symptoms are also of value and should not be neglected. Recently Dr. Artault de Vevey has reported to the Paris Biological Society the case of a young man who would awaken every morning with great muscular weakness, headache and vertigo, which symptoms would gradually decrease until evening, to reappear the following morning. An oleander plant standing in the room was discovered to be the cause; for, on removal, the disagreeable symptoms ceased. The physician in attendance had had a similar experience himself during his student years.—*Leipziger Populäre Zeitschrift fuer Homœopathie*, Nos. 11 and 12, 1897. This drug has been but little studied outside of the homœopathic school and very little even in that school. It is set down by old-school writers as an analogue of strophanthus, for the seed-pods of both greatly resemble each other. It is a decided heart poison. Kobert (l. c., p. 686) classes it with the digitalis group; i. e., attributes to it a digitalin-like action, together with apocynum cannabinum. As to the pathogenic action on the skin, I have collected a few notes in an article which was published in the HAHNEMANNIAN MONTHLY, May, 1896, and are grouped around a case of poisoning by oleander where the skin-symptoms were especially noticeable.

FRANK H. PRITCHARD, M.D.

THE HAHNEMANNIAN MONTHLY.

NOVEMBER, 1897.

ACONITUM NAPELLUS IN NON-FEBRILE DISEASES.

BY MARTIN DESCHERE, M.D., NEW YORK.

(Read before the New York Materia Medica Society.)

IF it needs an apology for bringing this well-known drug to your notice at the present time, the only one I have to offer is that I have frequently found it entirely neglected, or apparently forgotten, in conditions where its timely administration proved it to be the right thing in the right place. We should not set aside an old tried friend for any new, ever so promising, ones, and aconite is, and always has been, the very friend in need, the friend indeed.

It may be due to a tendency of overrating the value of our drug that the other extreme has resulted. Thus, Hempel, in his *Materia Medica*, considered aconite the panacea of therapeutics, and while Allen, in the ten volumes of his *Encyclopedia*, devotes 31 pages to its complete pathogenesis, and Hering, in the ten volumes of his *Guiding Symptoms*, 24 pages, Hempel, in his work, comprising but two volumes, gives it 84 pages.

Aconite has been before the homœopathic profession since the introduction of the homœopathic law of cure by Hahnemann, one hundred years ago, where he mentions it in his *Essay on a New Principle, etc.*, 1796. Its pathogenesis ap-

pears in the first edition of the first volume of the *Materia Medica Pura*, 1811. To the prompt action of this drug humanity owes eternal thanks for having delivered it from the curse of phlebotomy, so universally practised at that time. Hughes, in his *Pharmacodynamics*, remarks: "If homœopathy had done nothing for therapeutics but reveal the virtues of aconitum, it might even die content."

The almost specific effect of it as shown in acute inflammations, in inflammatory and catarrhal fevers, has suggested the name of "homœopathic lancet."

Again, these virtues have had the tendency of limiting the use of aconite mainly to such inflammatory states, and have misled many a practitioner to give it indiscriminately whenever fever is present. Even text-books, and especially books on domestic practice, have spread this error, and I think the first temptation toward the unscientific practice of alternating drugs in disease has sprung from this recommendation. For the same reason aconite has been overlooked in affections in which *fever is not present*; and as it should be prescribed frequently in cases where apis, arsenic, belladonna, cactus, chamomilla, glonoin, rhus, spigelia, etc., are given without effect, because uncalled for, I thought it not altogether amiss to bring once more to your notice the indications for aconite, which are similar to these drugs.

Farrington, in his *Clinical Materia Medica*, points out the uses for aconite in the following way: "Aconite produces two different sets of symptoms entirely distinct in their character, and as separate as though the drug were composed of two substances, each developing its own symptoms." (L. c., p. 288.)

I shall not mention the one of these two sets of symptoms, the key-note of which is inflammation, with the accompanying fever. The other action of aconite is very different from this. According to Farrington, "These symptoms belong more to the cerebro-spinal nervous system." "We find aconite useful for mental disease or hysteria when there is particular aversion to excitement, especially to busy streets. The patients dare not cross these streets because of fear that something will happen to them. This symptom is perfectly normal under some circumstances, but, when extreme, denotes over-excitement of the brain—common enough in hysterical patients. They are anx-

ious; they show an intolerance of music; they can bear no sounds, so sensitive are their ears; they imagine that some part of their body is deformed, *e.g.*, a limb is displaced, lips too thick, features distorted, imagine they do all their thinking from the stomach. Sometimes such patients during attacks of illness have 'spells' in which they predict the hour of death."

This last symptom has been considered to form a strong characteristic, though, in fact, it does not frequently occur, and only in greatly aggravated states of agitation; while we often meet the above mentioned milder degrees of mental irritation, in which aconite is apt to be overlooked. *Coffea* also has the symptom, predicts the hour of death.

Aconite is a very important remedy in the treatment of affections of the heart. The symptoms indicating it in these cases are numerous and important, and necessarily so since aconite so disturbs the blood flow, and also exerts a special action on the heart and its nerves. There are congestions to both heart and lungs, palpitation with anxiety, cardiac oppression, and even syncope. The palpitation is worse when walking. Lancinating stitches occur and prevent the patient from assuming an erect posture, or taking a deep inspiration. Attacks of intense pain extend from the heart down the left arm, and are associated with numbness and tingling in the fingers.

Farrington remarks: "In hypertrophy of the heart aconite is indicated by this numbness and tingling in the fingers. It is in uncomplicated hypertrophy of the heart only that you should give this remedy. In hypertrophy from valvular disease it may do great harm."

The experience of various observers does not coincide with Farrington on this point; in fact, compensating hypertrophy and over-compensation are benefited whenever this condition of numbness and tingling in the arm and fingers is present.

In *angina pectoris* aconite may become very useful, and it has often overcome these attacks promptly in the presence of fear of death, small, intermittent pulse, faintness, cold perspiration, numbness in the cardiac region and in the left arm. The condition of the heart during the apyrexia is very important for its selection. We then find strong contractions, characteristic of pure hypertrophy, also found in cases of over-compensation in valvular lesions.

In this connection I might mention the rapid effect of aconite in *purely nervous palpitation* without any organic disease. One dose will often be sufficient in such cases, caused by physical exertion or sudden mental excitement.

It should not be overlooked in *neuralgias*. Its well known effect in neuralgia of the trigeminus hardly needs to be mentioned here, and its special usefulness will develop in cases brought on by chilling after overheating, also by exposure to extreme cold winds in winter. Cases of *sciatica* have been favorably reported when caused by similar influences.

The main indication in all these painful conditions is that characteristic fear, extreme restlessness and irritability; while in the inflammatory affections and fevers we have the hard, bounding pulse, the vertigo, even to faintness on assuming an erect position, in addition to the above.

Aconite is one of those drugs in which the dose plays an important part. Hughes speaks of this when he says that the effect in febrile diseases was not warranted by the provings, but that Hahnemann was led to use aconite in fevers through his experience in cases where the mental symptoms called for it, and thus the extremely valuable indications for aconite in fevers and inflammations are really the result of clinical experience. Later experiments, especially on animals, have brought out the value of aconite as to the heart and bloodvessels, and there we have a strong evidence for the necessity of availing ourselves of records of clinical symptoms when accurately observed, as well as of the pharmacological experiments with drugs upon animals. While Hughes prefers the lower dilutions from the 1st to the 6th in fevers, he prefers higher dilutions in affections of the heart; and I think that Farrington's warning with reference to valvular affections points in this direction, as strong doses of aconite would there prove dangerous.

In diseases of children aconite might be used more than it usually is; for instance, in convulsions, whooping-cough, enterocolitis, worms, colic, retention as well as incontinence of urine, spinal meningitis, tetanus, paralysis, asphyxia neonatorum. Here we will frequently be justified in administering it, and mainly when we find again the restless tossing about, great thirst, sensitiveness to slightest pressure, as well as hyperaesthesia of the special senses. In abdominal affections the abdomen

is generally bloated and hard and very sensitive to touch. In peritonitis we find vomiting of green bilious matter, meteorism, and inability to pass water, besides the characteristic mental symptoms mentioned above.

For differentiation, we might point out the restlessness of rhus tox., arsenic and gelsemium. The rhus tox. patient is dull and heavy, while complaining of soreness of the parts lain on, and he consequently tosses about to find a comfortable position. Arsenic lacks the erythism of aconite entirely. It presents extreme prostration, pallor of countenance, and the restlessness is one of continually desiring to change place. Gelsemium represents a drowsy heaviness, with soft pulse and thirstlessness.

Many more points could be mentioned with reference to the use of aconite in non-febrile diseases, but, for fear of taxing your patience, I will here close my remarks, hoping that your experience, brought out in the discussion, may add to the value of this paper.

A MISTAKEN DIAGNOSIS.

BY E. H. LINNELL, M.D., NORWICH, CONN.

(Read before the Section of Ophthalmology, etc., American Institute of Homœopathy at Buffalo, June, 1897.)

IN February, 1894, Frank M., a man about 40 years old, first consulted me. He had lived for some years in California, but had been compelled to give up work on account of failing eyesight, and had been told by his physician that there was no hope for him. He therefore returned to the home of his parents a nervous, discouraged semi-invalid, expecting to become blind within a short time. His father brought him to me without much expectation of relief, but as a last resort.

He gave the following history: For a number of years he had been a railroad conductor, and at one time received an injury to the dorsal portion of the spine in an accident to his train, and he attributed the trouble with his eyes to this injury—an opinion shared, I think, alike by the oculist and the

physician whom he had consulted in California. For ten years his eyes had been weak, and he had worn glasses without relief. For some months before consulting me his sight had been failing, and his eyes had been extremely painful and sensitive to light. Examination disclosed a slight lateral spinal curvature in the mid-dorsal region, the situation of the former injury, and he had slight pain in this locality. I could not get a very satisfactory account of this injury, but it did not seem to have been disabling, and I did not think it was the cause of the curvature. He also suffered from insomnia, and had become despondent and debilitated. He was wearing smoked glasses for a very annoying photophobia, and complained of a severe pain extending from the eyes to the vertex. He was using $+ .50 \text{ D}^\circ \text{ ax. } 90^\circ \text{ o.u.}$ for distant vision, and $+ .50 \text{ D}^\circ$ in addition for near work. It required some patience and perseverance to test his visual acuity and refraction, on account of the photophobia and easy fatigue of his eyes. V. O. D. was found to be $\frac{1}{40}$, and with $+ .50 \text{ D}^\circ \subset + .50 \text{ D}^\circ \text{ ax. } 90^\circ$ it was increased to $\frac{1}{20}$. V. O. S. = $\frac{1}{20}$, and with $+ .25 \text{ D}^\circ \subset + .25 \text{ D}^\circ \text{ ax. } 180^\circ$ V. = $\frac{1}{5}$ diff.

The fundus of each eye was entirely normal, with the exception of a slight grayish pallor of the right disk, which might have awakened a suspicion of commencing spinal atrophy. Such a diagnosis was certainly not warranted in the absence of other ocular symptoms, and in the absence of any positive indications of disease of the spinal cord, and in view of the situation of the slight pain and spinal curvature *below* the cilio-spinal centre.

The next day the accommodation was paralyzed, and refraction found to be as follows: V. O. D. = $\frac{1}{70}$. With $+ 1.00 \text{ D}^\circ \subset + .50 \text{ D}^\circ \text{ ax. } 90^\circ$. V. = $\frac{1}{50}$. V. O. S. = $\frac{1}{70}$. With $+ 1.00 \text{ D}^\circ \subset + .62 \text{ D}^\circ \text{ ax. } 90^\circ$. V. = $\frac{1}{50} +$. With two eyes together v. = $\frac{1}{30}$ diff. With these glasses he had Es. $11\frac{1}{2}^\circ$ and no hyperphoria.

One week later, when accommodation was recovered, he accepted $+ .50 \text{ D}^\circ \subset + .50 \text{ D}^\circ \text{ ax. } 90^\circ \text{ O. D.}$ and $+ .50 \text{ D}^\circ \subset + .62 \text{ D}^\circ \text{ ax. } 90^\circ \text{ O. S.}$, substantially the same that he had previously worn for near work. With these, vision of either eye singly could not be made to exceed $\frac{1}{50}$. These glasses were prescribed for constant use, and as he still complained of the

neuralgic pains extending from the eyes to the vertex, cin. 6x was given. Suitable gymnastic exercises were also advised for the shoulder and back muscles, together with hot-water applications.

Ten days later he returned and reported that he had no more photophobia, and the pain from eyes to vertex had ceased. Vision with his glasses was now $\frac{1}{2}$ $\frac{5}{9}$. He complained of a sensation of pressure behind the eyes as if they would be forced out, throbbing, and a feeling that the eyeballs were too large for the orbits. He had an aching in the right eye which was sometimes quite severe, and occasional sharp pains across each eye. Prunus θ was prescribed. This was my last prescription. Two months later I met him looking perfectly well. He told me he had had no more trouble with his eyes, and was using them freely at desk-work in an office. I asked for the opportunity for another examination, but he was so well satisfied with his condition that he never returned. He went back to California soon after, and his father reports that he has continued well in all respects. I regret that I could not ascertain whether his vision became absolutely normal.

This case illustrates the serious consequences of a mistaken diagnosis, and emphasizes the importance of a more thorough understanding of the relations between ocular affections and constitutional diseases, both by the specialist and the general practitioner. If one or both of the former medical advisers of this man had correctly apprehended the nature of his case, it would have saved him much unnecessary suffering, both mental and physical. He did not have definite symptoms of tabes or other organic disease of the spinal cord, and while it is true that eye-symptoms accompany and often precede for a long time the advent of characteristic spinal symptoms, the case in question did not present the symptoms which are indicative of such lesions.

Such symptoms are of very great value in the diagnosis of incipient spinal affections, especially tabes, and may be briefly enumerated as follows:

Spastic mydriasis occurs in the so-called spinal irritation and in congestion, and in the early stage of inflammatory affection of the cord and its membranes.

Nystagmus and *paretic myosis* are associated with degenerative

processes. In acute and chronic myelitis there often exists neuritis or simple atrophy of the optic nerve.

Ptosis and *paralyses* of the ocular muscles are frequent premonitory signs of tabes. These paralyses are usually of sudden development and of transient duration, and resemble the ocular manifestations of syphilis and of multiple sclerosis. *The Argyll Robertson's pupil* is very characteristic of tabes, and occurs in about 70 per cent. of the cases, and in 25 per cent. it is an early symptom, and there is reflex iridoplegia, myosis, atrophy of the optic nerve, and consequent blindness.

The failure of vision and the pallor of the optic nerve in the case which has been outlined were somewhat suggestive of commencing spinal atrophy, but they were too indefinite to warrant a positive diagnosis. My own diagnosis was neurasthenic asthenopia.

THE TREATMENT OF DIPHTHERIA.

BY GEORGE B. PECK, M.D., PROVIDENCE, R. I.

(Read before the American Institute of Homceopathy, Buffalo, N. Y., June, 1897).

By the term "diphtheria," used in my circular of March 1, 1897, I understand the presence of Klebs-Loeffler bacilli on or about the pharyngeal mucous membrane, *accompanied* by any or all of the pathological conditions generally ascribed to their influence. The extent to which this definition would be accepted by my correspondents each reader of this report must determine for himself from the character of the replies submitted. Those found under questions eight, nine and ten I deem the most significant in this particular.

1. State the remedies most frequently called for in diphtheria in *the order of relative frequency*.

In reply I hereby present a table which indicates not only the minimum number of times a given drug is administered in one thousand prescriptions, but also the relative percentage (in tenths of a percentum) of our practitioners who find said drug to be one of the four most frequently called for by the particular conditions with which they are confronted.

Mercurius iodatus ruber, 137; kali bichromicum, 100; mercurius cyanatus, 83; belladonna, 82; lachesis, 65; mercurius iodatus flavus, 58; apis, 52; phytolacca, 49; mercurius corrosivus, 41; lycopodium, 24; arsenicum album, 23; aconitum napellus, 16; kali muriaticum and baptisia, each 14; arsenicum iodatum and gelsemium, each 9; nitricum acidum and kali chloricum, each 8; kali hypermanganicum, lac caninum and hepar sulfuris calcareum, each 7; ferrum phosphoricum and arum triphyllum, each 6; mercurius dulcis and mercurius solubilis, each 5; mercurius virus and rhus toxicodendron, each 4; bryonia, sulphur, ailanthus and echinacea angustifolia, each 3; kali phosphoricum, sanguinaria, argentum nitricum, naja, sulphuricum acidum, crotalus horridus, veratrum viride, eucalyptus and sodii sulphocarbolas, each 2; muriaticum acidum, tarentula, calcarea fluorata, calcarea phosphorica, calcarea iodata, hydrastis, natrum muriaticum, natrum salicylicum, guaiacum, iodum, bromium, causticum, kali cyanatum, antimonium et potassium tartaricum, atropinum, ignatia, kali iodatum, nitro-muriatic acid, amonal and diphtherinum, each 1.

2. State the nature and methods of local applications to the throat in cases of average severity, if any such are employed. If none are resorted to, be particular to mention that fact.

In this and in all subsequent replies figures denote the percentage of the entire number of our practitioners who use any specified substance or pursue any particular course save when the action of single individuals is distinctly indicated.

At least 11 per cent. of the members of this Institute forbid all kinds of local treatment in this disorder, one correspondent remarking, "We have something better," but hydrogen peroxide is used by 49 per cent. and alcohol by 33; potassium permanganate gargle by 14; spray by 3; undesignated method by 2, and with swab by a single individual; listerine by 6 and pyrozone by 4; potassium bichromate solution, potassium chlorate gargle, carbolic spray, protoneuclein and sulphur, each by 3; carbolic acid undiluted with swab, borolyptol, pinapin, papoid and hot water gargle, each by 2; phytolacca, pepsin gargle, powdered sugar, chloride of lime gargle, carbolic gargle, boric acid solution, methylene blue, a trituration of potassium permanganate with sugar of milk and gum acacia (gr. to 5), eucalyptus, glycerine and water, iodine solution,

chloride of lime spray, alkaline antiseptic spray, turpentine spray, corrosive sublimate spray, bromo chloralum, trypsin, hydrastis, chloride of iron tincture, calomel sublimation, steam of the indicated remedy, alcohol with glycerine and water, phytolacca with glycerine and water, kerosene, eucalyptol and electrozone, each by 1; Hubbard's germicide, brandy and water, glycothymolene, taka diastase, guaiacum, Carl Seiler's tablets gargle, lime steam, pinapin steam, Dobell's solution, lactic acid, white oak bark decoction, formalin spray, thymenthol, sodium sozoiodate insufflation, lemon juice and hot water, normal salt solution, echinacea tincture, vinegar, powdered charcoal and water, borax, carbolic with lactic and salicylic acid spray, corrosive sublimate gargle, chlorine water, hamamelis, bovine gargle, dilute carbolic acid swab, sulphur glycerole, menthol spray, capsicum gargle, muriatic acid, acetic acid, kali hypermanganicum 2x insufflation, boracic acid and papoid insufflation, hydrogen peroxide and formalin spray, alcohol with salt water gargle, alcohol with a few drops of phytolacca, coal oil to patches, boric glycerole and homœopathic alcohol spray, bichloride of mercury and chloride of lime, nitric acid, listerine and formaldehyd, Platt's chlorides, lime water spray, sulpho-calcine swab, iodine glycerole, sulphur fumes, tar and turpentine smoke, carbolated glycerine and water, baptisia gargle, spray of indicated remedy, glycozone, petroleum swab, bovine with alcohol and water, freshly made ammonium chloride, zinc sulphate, kali muriaticum gargle, boric acid with alcohol and water, medicated steam, salicylic acid and sulphur mixed by powder blower, each by *single individuals*. One person orders a gargle composed of calendula, $\text{℥}\overline{5}\text{j}$; alcoholic solution of tannin, $\text{℥}\text{ij}$; capsicum, $\text{℥}\overline{\text{m}}\text{xij}$; water, $\text{℥}\text{iv}$; another, olei eucalypti, acidi carbolici, $\text{āā}\overline{5}\text{vj}$; spiritus terebinthina ad $\text{℥}\text{vj}$; S. vapor in hot water day and night; a third directs a gargle of kali bichromicum, 1x grs. vj ; alcohol, $\text{℥}\text{ij}$; water, $\text{℥}\text{iv}$; a fourth a gargle composed of one-fifth salicylic acid, one-fifth alcohol, and three-fifths glycerine reduced by a sufficient amount of hot water, but he naively cautions against its too prolonged use else the patient will be worse than before; a fifth first sprays with a 50 per cent. solution of pyrozone, then washes with a 10 per cent. solution of hydrastis, and finally powders with vegetable pepsin. Finally, one physician states that when children

cannot gargle he administers half-teaspoonful doses of claret, and another never attempts any local application in infants.

3. State what other local treatment (if any) is resorted to when the deposit permeates the nasal cavity.

Note carefully the terms in which this, as well as the succeeding demand, is made, and remember that although the practitioner may change his prescription with a view to meeting this new condition, he may order that which another physician has employed from the beginning.

Declaration is explicitly made that no change is demanded by 40 per cent. of our members, but hydrogen peroxide is first brought into requisition by 8; listerine and the normal salt solution, each by 2; permanganate steam, lime steam, bromine inhalations, borolyptol douche, hot water douche, hydrastis *θ*, boracic acid, and permanganate unspecified method, each by 1; pepsin spray, alcohol spray, chlorine water spray, indicated remedy spray, cosmoline spray, carbolic spray, Seiler's tablets spray, vinegar steam, sulpho-calcium steam, plain steam, corrosive sublimate steam, vapor of chlorides, tar smoke, sulphur inhalations, iodoform, pyrozone, alkaline antiseptic solution, Reed and Carnrick's sulpho-calcine, glycerine and water, borax and listerine, 2 per cent. injection of the protiodide of mercury, Dobell's solution, lime water insufflation, kali muriaticum 3x insufflation, menthol and cocaine, phosphorus in aqueous solution, corrosive sublimate solution, boracic acid and calendula, permanganate with sugar of milk and gum arabic, boracic acid, a local sun-bath, drilling with probang saturated with pure tincture of iodine, each by single persons.

4. State what different remedies (if any) are called for by the existence of said condition *in the order of frequency of demand*.

The construction of my first table was possible only by restricting myself to the first four remedies mentioned by the correspondent. In this are to be found remedies specified under this head and not included in that number.

Specified relief is sought in this complication from arum triphyllum by 15 per cent., from kali bichromicum by 12, from nitricum acidum by 8, from arsenicum album by 6, from arsenicum iodatum by 4, from lachesis by 3, from mercurius cyanatus and rhus toxicodendron, each by 2; from muriaticum

acidum, mercurius corrosivus, bromium, allium cepa, mercurius iodatus ruber, hepar sulfuris calcareum, gelsemium, ammonium carbonicum, kali muriaticum, echinacea angustifolia, digitalis, apis, ailanthus, nux vomica, kali hypermanganicum, each by 1; from kali iodatum, capsicum, mercurius iodatus flavus, "the mercurials," sulfur, calcarea phosphorica, ammonium causticum, lycopodium, angustura, bryonia, eupatorium perfoliatum, baptisia, ignatia, lac caninum, carbo vegetabilis, kali sulfureum, causticum, antimonium et potassium tartaricum, the ophioidæ, pyrogen, mercurius vivus, iodum, chininum arsenicosum, mercurius solubilis, spongia, carbolic acid, lactic acid, silicea, kali phosphoricum, pulsatilla, each by single physicians. One practitioner states he gives one dose of the indicated remedy and waits, for repetition is fatal in these cases; while another considers the supervention of this condition the signal for the administration of antitoxin.

5. State what nourishment you are accustomed to administer to diphtheritic patients.

Anything nourishing is permitted by 16 per cent., but, more definitely, milk is ordered by 78; broths, eggs and eggnog, each by 20; beef-tea by 15; malted milk by 14; liquid peptonoids and grape juice, each by 10; beef juice by 9; ice cream, pinapin, bovine and gruels, each by 6; mutton broth by 5; predigested foods (notably panopeptone), liquid foods and white of eggs, each by 4; cream, beef peptonoids, buttermilk and kumyss, each by 3; chicken broth, oranges, clam juice, fruits, milk preparations, beef, Valentine's beef juice and concentrated foods, each by 2; lemons, wine whey, eggnog rarely, custard, grapes, porridges, rice, barley water, somatosemeat juices, chopped raw beef, mutton, raw meat juice, meat extracts, Wyeth's beef juice, bovox, Armour's nutrient wine, baked apples, oysters, Mellin's food, meat jellies, beef broth, toast and semi-solid food, each by 1; beef juice peptonized, rice gruel, sterilized milk foods, cod-liver oil, beef cocoa, milk whey, matzoon, Murdock's liquid food, raspberries, blackberries, egg and whiskey, egg and sherry, cranberry juice, rice water, Romanshorn milk, blanc mange, wine jelly, chicken, honey, yolk of egg, oatmeal gruel, creva, protoneuclein and Reed and Carnrick's trophonine, each by single individuals. One per cent. of our practitioners forbid milk, while solitary

practitioners forbid respectively solid foods, animal extracts, beef extracts, oranges, broths of lamb or veal or chicken. One doctor remarks that he is not partial to animal foods in septic conditions; another states that he generally uses some antiseptic with the food; a third urges the eating of water crackers for their mechanical effect on the membrane; while a fourth orders a raw egg, with two ounces each of milk and cold coffee.

While the schedule adopted in this and some succeeding statements may not seem sufficiently condensed, yet it will be difficult to find two terms with identical signification, and justice to each correspondent requires that his particular shade of thought shall be portrayed, if possible.

6. State what beverages you allow such patients.

Water is permitted by 58 per cent., lemonade by 16, coffee by 12, tea by 10, any desired by 8, cocoa and orangeade, each by 4; orange juice by 3; toast water, fruit waters, chocolate, acidulated waters and Vichy, each by 2; sweet cider, hot water, slippery-elm water, flaxseed water, lemon ice, orange ice, carbonated water, Apollinaris, egg lemonade and soda water, each by 1; ice water, boiled water, cereal coffee, dilute wine, mucilaginous drinks, milk and seltzer, sparkling waters, jelly water, crust coffee, Lithia water, alkaline mineral waters, Moxie, each by single individuals.

Coffee is forbidden by 1 per cent., and tea, ice water and acid drinks, each by solitary practitioners.

7. State in what form and in what manner you direct the use of alcohol or liquors for said patients, if at all, and if not already sufficiently indicated.

This class of substances is *never* used by 13 per cent. of our members, and but *rarely* by 10 more, but whiskey and water is recommended by 27, brandy by 14, milk punch by 10, alcohol by 8, whiskey in milk and champagne, each by 6; wine by 5, stimulants as required by 4, milk punch rarely by 3, whiskey if required by 2; brandy rarely, brandy and milk, claret, toddy, rum, sherry, alcohol bath, each by 1; whiskey and milk enema, brandy and beef tea, peach brandy rarely, beer, Madeira wine, sherry rarely, sour wine, dry wines, "any kind" of liquor, an alcohol and soda bath, wines or brandy in convalescence, "only hypodermically *in extremis*," whiskey with glycerine and water,

each single correspondents. One physician forbids whiskey, while 1 per cent. direct it should be pushed until its intoxicating effects are manifest, when recovery may safely be prophesied. Intoxicants are administered "as desired" by 1 per cent. also, while another per cent. add if needed to medicine in glass.

8. State the local (adjuvant) treatment resorted to by you when diphtheritic croup supervenes. (N. B.—No reference is made in this circular to non-infectious membranous croup.)

Before presenting the replies to this and the two following questions which are most intimately related, I wish it to be distinctly understood that I meant precisely what I wrote when I penned the above parenthetical remark. If any practitioner entertains pathological opinions at variance therewith, and has answered accordingly, the responsibility is his, and not mine.

No change is found to be necessary in their mechanical treatment by 10 per cent. of our members. Although the diphtheritic membrane should enter the larynx, and even penetrate to the trachea, but 20 per cent. deem the use of "steam" suitable at this point. Others speak more definitely, for lime steam is ordered by 18, bromine inhalations by 6, calomel fumes by 4, eucalyptus steam by 3; iodine inhalations, iodine steam, vinegar vapor, turpentine vapor, kali bichromicum solution, indicated remedy steam, lime water spray, each by 2; protoneuclein, hydrogen peroxide, cold compresses, cider vinegar steam (or wash), creosoline fumes, potassium permanganate, carbolic acid steam, mercurial fumigation, chlorine vapor, benzoin steam, "various steams," kali bichromicum spray, papoid spray, "the steam atomizer," vinegar lime steam, each by 1; pine needle oil steam, iodine and creasote steam, chloride of lime vapor, sulphur powder blown on membrane, sanguinarin 1x trituration similarly used, trypsin, turpeth mineral, fumes of sanitas, pinapin, Dobell's solution, lactic acid steam, acetic acid steam, steamed spray of dilute carbolic acid with eucalyptus and turpentine, chloride of lime gargle, pine tar smoke, tar steam, tar and turpentine smoke, pepsin spray, antiseptic inhalations, acetate of sanguinaria, hydrogen peroxide swab to larynx, cosmoline spray, eucalyptol, creasote, baptisia gargle, bromoform, petroleum with applicator, calcium iodide solution, dilute vinegar gargle, chloride of lime, each by single persons.

No application is resorted to by at least 2 per cent. of our members, perhaps not by any of the 11 per cent. who made similar reply to the second question. The eating of ice is recommended by 1 per cent., while another per cent. quietly notifies the friends an undertaker will soon be in demand. One doctor remarks he uses "many things, but with the same result, these cases die for me;" another utilizes the steam from terebinthina, 5j; ol. eucalyptus, 5j; carbolic acid, 5j; water, Oij; a third steam medicated with pine tar, 5ij; ol. terebinthina, 5iij; ol. eucalyptus, 5iv; a fourth prefers potassium bromide, 5j; bromine, grain j.; water, 5j; while a fifth makes applications of hot coal oil and lard, one part to three, also internally a half-teaspoonful of coal oil when the breathing gets really embarrassed. He adds that he "don't know as this treatment is of any real benefit, but they will do it any way."

9. State what different remedies (if any) are called for by the existence of this condition *in the order of frequency of demand*.

Bromium is mentioned by 29 per cent. of my correspondents, kali bichromicum by 28, iodum by 19, spongia by 15, hepar sulfuris calcareum by 14, calcium iodide by 6, aconitum and lachesis, each by 4; mercurius iodatus ruber, mercurius cyanatus, phytolacca, phosphorus, chlorum and antimonii et potassæ tartaricum, each by 2; sanguinaria, belladonna, arum triphyllum, arsenicum, acetic acid, mercurius dulcis, apis, ammonium causticum, sulfur, acetated tincture of sanguinaria, kali chloricum, ipecacuanha, kali hypermanganicum, ammonium carbonicum, kali muriaticum and nitricum acidum, each by 1; lycopodium, cuprum, gelsemium, aqua ammonia, calcarea phosphorica, naja, turpeth mineral, causticum, calcarea chlorata, kali cyanatum, kali iodatum, cherry red solution of potassium permanganate, kaolin, mercurius iodatus flavus, baptisia, arsenicum iodatum, diphtherinum and lac caninum, each by individual doctors, while another remarks that he has at this point no use for remedies.

10. Do you resort to intubation or to tracheotomy in such cases, and if so, with what success?

No occasion for either of these operations has been found by 13 per cent. of our practitioners, 2 per cent. find the friends object, and 29 per cent. more affirm they never resort to them, one stating his reluctance arises from the fact that under the

care of others he never has seen it (tracheotomy) save a patient. "Yes" is the answer of 16 per cent., but unfortunately they do not specify which. They continue, however, to remark, 3 per cent. that they have good success, 5 per cent. not good, 2 per cent. fair, 2 per cent. fatal, 1 per cent. "rarely, with no success, generally fatal," and single individuals report 7 recoveries out of 24, two-thirds saved, one-half saved, less than half saved, success variable, saved 6 out of 14, saved one-third, "all die and shall not do it again," "three times, with as many deaths in my early practice, when I did not know any better." "No, but will," is the sententious reply of 1 per cent.

Both operations are distinctly stated to have been used by 5 per cent., 2 per cent. adding they met with no success, while single individuals affirm both are satisfactory, success is equal, two intubations and one tracheotomy alike fatal, intubation preferable, tracheotomy usually fatal but intubation good if over five, good results from intubation but none from tracheotomy, efficacy of tracheotomy doubtful, while intubation is harmful. Tracheotomy has been resorted to by an additional 9 per cent. of our number with the following results: All were lost by 3 per cent., poor results were experienced by 2, one-half saved by 1, two-thirds saved by 1, relinquished for antitoxin by 1; fair success, three-quarters saved and results unspecified, each by single individuals.

Intubation has been more specifically reported on by 19 per cent. as follows: One-half saved by 3 per cent.; results not stated, results favorable, success partial, one-third saved, success small and all fatal, each by 2; successful terminations, four-fifths saved, two-thirds saved, one intubation fatal, each by 1; three-fifths, one-quarter and one-sixth saved each by single individuals. One correspondent says he wishes he had tried intubation once, while another has seen or known of at least twenty-five cases of intubation with no recoveries.

11. Have you ever used antitoxin? If so, with what success?

To this interrogation 51 per cent. of our members promptly answer "No," some very emphatically, while 37 per cent. respond in the affirmative. Of these, 16 per cent. report their success good, one individual inserting the proviso "If it be used early," and another stating that he used homœopathic remedies, as usual. Perfect success was attained by 4 per cent. The re-

covery of all cases treated is reported by 2 per cent., but in each instance the homœopathic remedies were continued as usual, and one of these doctors adds, "It must be used during the first three days; afterwards only 85 or 90 per cent. of the patients can be saved." He also adds that "both act better than either alone." The loss of but one out of all treated is reported by 1 per cent., but unfortunately they did not indicate the number of their patients. The recovery of all is also reported by 1 per cent. but these candidly add that perhaps the result would have been the same without it. The serum has been used once only, and that successfully, as well as the saving of 50 per cent., are mentioned, each by 1 per cent. One doctor had six cases with one death; another sixty-six cases with three deaths, who adds that the remedy is most needed when the glands are involved and that it is the greatest discovery of the decade and of the century; a third thus saved four cases of diphtheritic croup, whereas previously he had lost all; a fourth reports 50 per cent. of recoveries, but believes 40 per cent. would have convalesced without it; a fifth states that it is the most effective remedy we possess, obviating intubation, with an action strikingly homœopathic; a sixth states he treated thirty-seven cases with thirty good recoveries, six fair, and only one death, in a child but one year old, and moribund when first seen; a seventh saved one patient that he is satisfied would have died without it; an eighth saved 50 per cent., but suggests they might have recovered had it not been used; a ninth saved 75 per cent. by it; a tenth deems his success only fair; an eleventh administers it when called for and has experienced no bad result after the injection; but the twelfth affirms that, although it cures, it is followed by an abscess; while the thirteenth states that of the five fatal cases he has met in the last thirteen years two had the benefit of antitoxin. On the other hand, of those who have tried antitoxin, 2 per cent. each report "no success," "won't any more," "one case no good," "once—died," a single individual adding "paralysis of the heart;" 1 per cent. each "little success," "no opinion," and "no greater percentage of cures;" single practitioners, "after results, herpes with prostration and anæmia," "patient lived three hours," "do not recommend," "negative results with dangerous symptoms." Summarizing: of the 37 per cent. of our practitioners who have tested anti-

toxin to a greater or less extent, 16 per cent. (relatively 43.5 per cent.) have failed to be impressed with its virtues. It remains to add that 1 per cent. of our practitioners have administered the remedy by request and all thus treated have recovered, but would have, in their opinion, without it; 2 per cent. say they have not but will; one individual has found no occasion to use it, another employs diphtherinum, while a third declares Edson's aseptolin is superior to antitoxin, if, indeed, it be not the active agent for all its good.

Perchance at this point I may be pardoned a digression. I completed the mathematical calculations essential to this report early the morning of May 31, 1897. That very forenoon, according to my best recollection, I took from my post-office box a sample copy, June number, of an allopathic magazine, published in one of our leading railroad commercial centres, which contains in every issue ample proof of an extensive circulation, and which I would deem *essential* to my office-table, were I not a homœopathist. Tearing off the wrapper, as is my wont, while standing on the steps, and glancing at its contents, by a singular coincidence the following concluding paragraph of an editorial near the middle of the pamphlet first fell under observation, and naturally riveted my attention: "When we consider, therefore, that antitoxin has not reduced the mortality rate during the epidemics of the past three winters, that its use is followed by numerous unpleasant symptoms and sequelæ, with the danger, in each new case, of sudden death, its continued use savors of criminal malpractice."

12. Have you ever used oxygen or other "constitutional" treatment for this disease? If so, with what success?

To this interrogatory 83 per cent. reply No, 10 per cent. Yes, and 1 per cent. Rarely. The effect was found to be good by 6 per cent., but doubtful by 1 per cent. Single practitioners report "one trial with negative results, due possibly to deficient apparatus," "best heart stimulant ever used," "used to use it but not much now," "success poor," "once—no good," "for sequelæ, excellent," "not sufficient for a fair trial, but deem it worthless." One other states that he will use potassium permanganate hypodermically.

13. What external treatment, if any, do you employ in any of the forms of this disease?

"None" is the prompt rejoinder of 42 per cent. of our members, one of whom remarks, "Homœopaths don't need it." Hot, moist flannel bands are employed by 7 per cent., salt pork by 5, black pepper being added by 1 per cent.; cold water compresses and poultices, each by 4; wet bands, flannel bands, heat, alcohol baths and bacon, each by 2; oil, kerosene oil, ice-pack, alcohol and water-bath, witch-hazel, hot, iodine, anti-phlogistine (a medicated clay), hop fomentation, hot poultices on swollen glands, vaseline, cold compresses, moist heat on swollen glands, cotton or carded wool as protection, turpentine, cool water compresses, cold, each by 1; a hot bath with ice-bags at the same time and ice internally, grease, olive oil and turpentine, hot, full bath in young children, tepid sponging for high temperatures, olive oil, almond oil, cocoa butter, campho-phenique on swollen glands, mush poultices, flaxseed poultice and alcohol, vaseline on swollen glands, hops and vinegar poultice, Goulard's extract, goose-grease, smoked bacon on swollen glands, vaseline and turpentine, powdered ice, onion poultices, flaxseed with oil and turpentine poultice, coal oil, unguentum hydrargyri, liniment of coal oil with turpentine and lard, soap-and-water bath once a day, sponge bathing at high temperature, hot baths in high temperature, hot compresses over larynx and trachea, iodine glycerole, liquid cosmoline, dry absorbent cotton with gutta-percha gauze, "a particular plaster behind the ears," stimulating liniments, melted lard, biniodide of mercury, grain j, with vaseline, 5j, mustard paste, cocoanut oil rubs, myopetroleum nigrum, unguentum hydrargyri ammoniati, solution of internal remedy, counter-irritants, vinegar, mercurial inunctions, alcohol locally, cotton batting, olive oil with kerosene, salt pork sprinkled with capsicum, and a lotion containing "terebinth, vaseline, olive oil, spirits of camphor, spirits of ammonia, with tincture of iodine," each by single practitioners.

14. What prophylactic measures, if any, do you resort to when in charge of a case of diphtheria (*a*) for yourself? (*b*) for the nurse and members of the family?

Foster defines "prophylactic" as "preventive of disease or intended to prevent it." That thought in its most restricted sense was my idea when penning this question, and shall limit and govern the appended tabulations. All ordinary, and even

extraordinary measures that properly might be reported under hygiene or sanitation, are rigidly excluded.

Prophylaxis, strictly speaking, is apparently unthought of by at least 60 per cent. of our membership. Alcohol is resorted to by 6, listerine by 5, potassium permanganate, carbolic acid gargle, borolyptol, tobacco and mercurius iodatus ruber, each by 2; hydrogen peroxide, antiseptic spray, boric acid gargle, sulphocarbonate of soda, gum myrrh, a strong pipe or cigar, brandy or whiskey, lachesis, kali muriaticum and belladonna, each by 1; carbolic acid spray, pinapin, pasteurine, protoneuclein, vinegar gargle, sulphur in stockings, Dobell's solution, inhalations of carbolic acid crystals and glycerine, potassium chlorate crystals in mouth, alcohol and phytolacca, "phytolacca θ and veratrum θ pills four times daily," *antitoxin occasionally*, diphtherinum, camphor, apis, case remedy, eucalyptus, kali bichromicum and echinacea, each by single physicians.

Prophylactics are not ordered for the nurse or for the family by at least 44 per cent. of our number; but for one or the other or both alcohol is ordered by 10, listerine and water by 5, mercurius iodatus ruber by 4, potassium permanganate by 3—one of whom adds he gives medicine along with it—belladonna, lachesis, the case remedy, carbolic acid gargle, hydrogen peroxide, borolyptol and antitoxin, each by 2; bromochloralum, antiseptic spray, boric acid gargle, gum myrrh, liquor calcis chlorinatae, sulphocarbonate of soda, antitoxin for children under ten years, potassium chlorate crystals in mouth, formaldehyd, protoneuclein, "slight stimulation," whiskey, diphtherinum, kali muriaticum and mercurius corrosivus, each by 1; carbolic acid spray, euthymol, pinapin, alcohol and phytolacca, cinnamon tea gargle, listerine and glycerine gargle, chlorine gas, sulphur in stockings, pasteurine, pyrozone, bovine and alcohol gargle, vinegar gargle, hot salt solution, "gargles," inhalations of equal parts of carbolic acid crystals and glycerine, camphor, phytolacca θ and veratrum θ pills four times daily, mercurius iodatus flavus, echinacea, kali chloricum, mercurius cyanatus, eucalyptus, apis, arsenicum, ferrum phosphoricum and kali bichromicum, each by single physicians. Furthermore, one other practitioner uses the following gargle both for himself and the members of the inconvenienced family:

Ferri chloridi, acidi phosphorici diluti āā 5ss; glycerine, 5j; water, 5iv.

15. Direct my attention to other important points of treatment not covered by preceding requests.

Many correspondents urge the importance of the "recumbent position and perfect quiet even for days and weeks after the attack;" others suggest frequent examination of the urine for albumin. Some "would give more attention to the daily movement of the bowels," while the prudent caution us to "not doctor too much." I am sure most of our members would respond "Amen!" with the heart, if not with the lips, to the rather blunt injunction of a brother, which cannot, however, be too often iterated in the presence of professed homœopaths: "Treat the patient, and let the disease go to your dear old uncle D——!"

It remains to gather up a few stray jottings. One practitioner reports a loss of one patient in forty from post-diphtheritic paralysis; another suggests for the relief of that condition strichninum and zincum phosphoricum; while a third states that of thirty-one cases treated the past winter, four being diphtheritic croup, he lost but one, and that from heart failure, three days after the membrane disappeared. One gentleman declares he has "seldom lost a patient when called early, yet a certain small percentage are recognized as incurable, depending on some latent constitutional dyscrasia." Another "allows no so-called disinfectant in or near the room; a poisonous vapor that will kill animalculæ will more surely kill a half-dead patient, and also the remedy. I learned this by disastrous experience years ago." A third says that when he finds the membrane in a very late stage at his first visit, he applies, after swabbing, a powder composed equally of quinine and sulphur. Petrojel is employed by one doctor to soothe the sensitive throat after the shedding of the membrane; strychninum by another as the specific for heart failure; while still another declares ferrum phosphoricum 3x and kali muriaticum 3x will cure every case of uncomplicated diphtheria. Quite a number of those who report they had not used antitoxin took the trouble to add that, by the published reports concerning its use or their personal observation of the results of its administration by others, they failed to discover any gain from its

administration, or were satisfied its action is murderous, as it may have chanced.

One correspondent writes: "Post-diphtheritic disorders are quite important, and their frequency following the antitoxin treatment should be especially noted. Numberless children die in a few weeks or months after its use." Another states: "I nearly killed one patient with it, and he says he will take his diphtheria straight next time!"

I am led to believe diphtheria is well-nigh unknown to people using mountain and Pacific time; also to residents of the South Atlantic and Gulf States.

I can conclude this paper no more appropriately than by proposing Question No. 16. Since, of every hundred decedents from measles in the years 1891-95, sixty-six might have been saved had they been treated homœopathically, twenty-nine of every hundred from scarlet fever, forty in every hundred from typhoid fever, and forty in every hundred from diphtheria in the year 1895, when the culture test was unquestionably applied to every case by every board of health in our large cities, why should I stop to test every passing fad of the dominant school?

NOTE 1.—Occasionally recommendations have been omitted on account of the reporter's inability to identify the articles specified through obscure chirography or other equally forceful obstacles. Pinapin has been used occasionally as a synonym for pineapple juice.

NOTE 2.—Since completing this paper, a typewritten report of an epidemic of diphtheria in the Cincinnati, Ohio, Orphan Asylum has been received under circumstances which enforce attention. Prepared by H. H. Wiggers, M.D., it will appear in the *Homœopathic Journal of Otology, Ophthalmology, and Laryngology*, and is endorsed in pencil by C. D. Crank, M.D., who supervised the entire treatment and assumes all responsibility in the premises. The outbreak followed an epidemic of measles so closely as in some instances to be absolutely a complication thereof. Twenty-three of the cases, among which were three intubations, were treated in the institution with but a single fatal result, a child five years old that had suffered from measles with bronchial complications, and an exceedingly high temperature before diphtheritic symptoms were manifest. It is

claimed death was really the result of pneumonia following measles. Forty-five children who had been exposed received immunizing doses of antitoxin, 250 units each. One developed diphtheria next morning, and five more perhaps a month later. Local applications, consisting chiefly of hydrogen peroxide, carbolic acid, ichthyol, corrosive sublimate and potassium permanganate were also used, and mercurius cyanatus, mercurius iodatus ruber, kali bichromicum, spongia, etc., were administered internally. The food was milk and whiskey; the throats and noses were irrigated. The death rate was 3.6 per cent.

With this statement should be compared the experience of the Tobey Street Home of the Children's Friend Society of Providence, R. I. During the past twenty-four years there have been 102 cases of this disorder treated by at least four different physicians, with a total loss of three, or a mortality of 2.94 per cent. Forty cases occurred in one epidemic, prior to the use of the culture-test, but the diagnosis was confirmed by Charles Value Chapin, M.D., our distinguished Superintendent of Health, than whom there is not a more accurate and conscientious expert. These were all brought to a successful termination by Emily Metcalf Thurber, M.D., a member of this Institute. One year ago last winter, another epidemic of thirty-six cases was brought to an equally satisfactory termination by Henry Mortimer Sanger, M.D., also a Fellow of the Institute. The diagnosis in each of these instances was verified by cultures. The remedies chiefly employed were kali bichromicum, the two iodides and the cyanide of mercury, apis and belladonna, most of them being 3x. As adjuvant treatment, hydrogen peroxide spray was used in about half the cases, and alcohol in most of the remainder. Whiskey and water as a beverage was resorted to when the symptoms were very severe. The children were fed with liquid diet, including bovine and Murdock's liquid food. Little milk was used, on account of a general tendency to emesis. The total number of children in the institution was ninety-four. The epidemic came to a well-rounded conclusion, and there has been no reappearance of the disorder in over a year. No room was found for antitoxin.

THE BICYCLE AND THE KIDNEYS.

BY CLIFFORD MITCHELL, M.D., CHICAGO.

THE following clipping has appeared in several medical journals:

THE BICYCLE AND THE KIDNEYS.—The *Gaz. degli Osp. e delle Clin.* of December 24th describes some recent investigations of the urine of healthy subjects before and after bicycle riding, which showed in half of the cases such an abundance of albumin and cylinders of various kinds that the diagnosis of acute or chronic parenchymatous nephritis would certainly have been made by anyone unacquainted with the circumstances. It is evident that the condition is what Leube designates as physiologic or functional albuminuria, with the difference that Leube and Senator state that there is no trace of cylinders in physiologic albuminuria, while in eight riders examined, members of a bicycle club, tube-casts of all kinds were found in abundance in all but two, with more or less albumin in all. Four other riders gave out after an hour and a half or three hours' ride, and in two of these the urine was normal; in the other two it was moderately albuminous, with no casts. Five healthy boys also showed albumin in the urine after riding. The writer concludes that the frequent repetition of such experiences can scarcely fail to terminate in chronic nephritis sooner or later.

It seems to me that in a general way a statement of this kind is likely to do much harm. No mention is made of the rate of speed at which the riders rode nor whether they were people accustomed or unaccustomed to exercise.

I am not the one to deny that if a person unaccustomed to exercise rode one hundred miles in six or seven hours over rough roads he might have albumin and casts in his urine, whereas an athlete could venture over the same course in the same time without shedding so much as a cylindroid. It is also possible that what would be moderate riding to many, say twenty-five miles in a day, would be far too much for some few, especially for delicate women.

I do not see that the writer in question proves anything except that half the people over-exercised, which they could also do at tennis, foot-ball, swimming, skating or dancing.

There is by such articles a slur cast upon bicycling. Of the thousands who ride the bicycle a certain percentage will certainly overdo, but it does not follow from this that all bicycle riding is dangerous to the kidneys. So far as my own experience goes I see one hundred people who ride slowly a few miles through the parks to one who rides even twenty-five miles. The danger of cycling lies in the fact that so many who are totally unaccustomed to athletics have easy opportunity to over-exert themselves; but, on the other hand, those unaccustomed to exercise are so tortured by the bicycle-saddle that they are not likely to get so far as polysyllabic nephritis in their lesions, which are usually wholly superficial, however uncomfortable.

In my own case, after a brisk ride of five or six miles at the rate of ten miles an hour, my pulse was but 65. Riding thirty miles against a Chicago wind over rough country roads and home again twenty miles with the wind, fifty miles in all, in five hours did not produce so much as a single hyaline cast when the urine voided during the whole time was examined with the microscope, the centrifuge being used for sedimentation.

I notice a falling off in my office practice during the bicycle season and a general improvement in the condition of such patients as, having no organic lesion, ride the wheel during the summer months. The greatest danger in bicycle riding is to the doctor's pocket-book!

THE CLASSES OF CASES OF PULMONARY DISEASE IN WHICH THE CLIMATE OF ATLANTIC CITY, N. J., IS BENEFICIAL.

BY M. D. YOUNGMAN, M.D., ATLANTIC CITY, N. J.

(Read before the Homœopathic Medical Society of the State of Pennsylvania, Scranton, 1897.)

I THINK it will be conceded without dissent that "climate" is one of the most potent remedies at the command of the physician. This being true, it is as essential that the prescriber should have an accurate knowledge of the "climate" he prescribes for his patient as it is that he should have definite

knowledge of any other remedy. I have heard many, sometimes conflicting, opinions expressed concerning the advisability of sending cases of pulmonary disease to Atlantic City, and I propose to outline briefly the particular classes of cases in which this climate is valuable and of benefit. Before we get into "applied therapeutics" let us have a description of our remedy.

Atlantic City is located upon an island, which island is five miles from the mainland, and faces very nearly south, and is the only island on the New Jersey coast that enjoys this southern exposure. It is wholly surrounded by unmixed salt water. Atlantic City has a resident population of 22,000, and cares for a transient population which varies throughout the year from 60,000 to 150,000. It has seven hundred hotels and boarding-houses, some of them the finest hotels in the country. It has four thousand private residences and forty miles of beautifully-kept streets. It has no industry save that of catering to health, and upon this sole foundation it has grown from a village of 1000 in 1870 to a city with 22,000 in 1897. It has an annual death-rate of eleven to the thousand. It has forty-eight practicing physicians. It is the only all-the-year-round health resort in America. Its water-supply is from springs and deep artesian wells. Sewerage disposal by a system of lead-jointed iron pipes, being the system known as the "West Filtration System." Garbage disposal to the amount of one hundred tons per diem by crematory.

The climate has two grand characteristics: 1st, "absence of humidity," and, 2d, "equability of temperature." These are the sole explanations of its phenomenal growth and reputation. The climate is remarkably free from wind, there being less than half the amount experienced by some of the New Jersey coast stations. There is a very curious fact, verified by the statistics of eighteen years, and that is that the annual rainfall is almost uniformly three inches per month. This is very low. The soil being a dry white sand, there is no evaporation to produce humidity of the atmosphere after a rainstorm. There is no snow in the winter, and no humidity in the winter and very little in the summer. There is a remarkable freedom from fogs, and those that do drift in are almost invariably dry. It is notorious that the "beaches" lying off the coast are much

more free from fog than the mainland. There is no rapid fall of temperature after sunset. The winter climate is particularly clear and bright, free from wind, and devoid of fog or mist. There being no vegetation, there is absolutely no malaria.

The equability of the climate is due to the proximity of the Gulf Stream and the island being surrounded by water. Water absorbs heat and parts with it by radiation more slowly than the land; hence in hot weather the water is comparatively cooler than the land, while in cold weather it is warmer. The climate is stimulating, very much more stimulating than that of the adjacent coast. This quality of "stimulation" is the "*key-note*" to be borne in mind in considering this climate as a remedy for a case of pulmonary disease. Atlantic City is a "stimulant." There is, indeed, a sedative or soporific *quality* in the atmosphere, due to the evaporation into it of various bromides, iodides, etc., that causes it to be sought by patients suffering from insomnia. It also exerts upon many nervous maladies a "sedative" effect; but for the pulmonary invalid it is to be thought of always, and primarily as a "stimulant."

Now the first class I want to consider is not, strictly speaking, pulmonary, but closely allied thereto; I refer to throat cases. Throat diseases all do well in this climate except those cases of tuberculosis of the throat that have had or might have hæmorrhage. These latter cases should be kept far away from this dry, stimulating climate, because it will almost invariably cause and increase the tendency to hæmorrhage.

The second class of cases, and these are also not pulmonary in a strict sense, are the victims of hay fever. Hay fever sufferers are benefited in three ways:

(a) By the general improvement wrought, the increased metabolism attained, and the more effective elimination of uric acid secured, the "*predisposing*" cause may be removed. Here we secure "the all around" tonic effect of the climate.

(b) By the healing, alterative qualities of the atmosphere, laden as it is with the emanations of iodine, bromine, chlorine, ozone, potash, etc., and applied to the whole respiratory tract, particularly the nasal portion: at each and every respiration the "*determining*" cause may be partially or totally abated.

(c) In consequence of the freedom from contamination by

pollen, dust or other irritating matter (due to the paucity of vegetation, the non-existence of factory smoke, etc.) of the atmosphere, the "*exciting*" cause of the paroxysm does not exist; and while of course the victim is *still* a victim, as he is in January, when he thinks himself free from hay fever because he is not exposed to the *exciting* cause, still the manifestation is prevented, and he rejoices accordingly. Much of what I have said of hay fever will apply as well to asthma, particularly the influence of the climate on improved metabolism, increased oxidation and augmented uric acid excretion; preventing the uric acid bronchitis and vaso-motor spasm, so frequently the diathetic state upon which the asthmatic exhibition is predicated.

The third class of cases that are benefited by the climate of Atlantic City are the convalescents from la grippe, pneumonia, capillary bronchitis, etc., *et al.* To these the climate is a veritable El Dorado of health, and the benefit is direct and indirect—direct, because the irritated, inflamed and perhaps torpid mucous membranes are bathed in the balmy, soothing, salt-laden emanations from the ocean; and indirect, because of the warm dry air, the absence of high buildings crowded together (converting streets into flues), the commodious boardwalk, with its inviting accessories of rolling chairs, pavilions, casinos, ocean piers, etc., which permit the convalescent, be he ever so feeble, to get out in the blessed sunshine. And if he cannot attain this outing by reason of feebleness, he can sun himself in one of the luxurious "sun parlors" if in winter, or porches if in summer, with which all the hotels are fitted. And here let me tell you a little incident. I was called one day last March to see an elderly lady, who had been sent from Pittsburgh to recover from a severe attack of bronchopneumonia. I found her with high temperature, dry, hard cough, very much discouraged and homesick. After listening to her sister's narrative, which was full of disappointment, distress and alarm, I examined the patient carefully, who was only anxious to get well enough to journey home, saying she had been here two weeks, had not improved, and had "taken cold" every time she had gone out-of-doors, and "the air was too strong for her." I listened patiently to her tale of woe, spoke encouragingly to her, saying I was confident she would soon be

well if she would stay and confine herself to the hotel and its sun-parlor. She retorted at once: "I would rather be at home if I have to be housed up. I have a good deal pleasanter, larger room at home than this little box," looking around with contempt at the costly hotel room. And I replied: "True, but then your room, so large and lovely at Pittsburg, is filled with Pittsburg air, and your room here in this hotel is filled with Atlantic City air, full of sunshine, ozone and salt, identically the same air you would breathe out on that boardwalk, only not so cold, being warmed in here by the steam radiator." This appealed to the dear old lady, and she stayed and got well. But this truth is often overlooked. Many patients who come think, if they are ordered to go up in the town, away from the too strong air of the ocean front, or are required to keep in-doors for a few days to get acclimated, that they are not getting the fullest benefit possible out of their visit, and are often dissatisfied.

To return to the convalescent. It is wonderful with what rapidity the lesions indicative of retarded convalescents will clear up in many of these cases. Bronchioles and air cells, agglutinated by exuded serum, will open and admit the inspired air. Areas of consolidation will disappear, the distressing cough and its attendant expectoration will soon follow, the appetite improves, renewed vigor is manifested, and the patient soon begins to inquire when he may get home to the business of life again. In many cases of this class the benefit is largely ascribable to the antiseptic qualities of the atmosphere as well as to its general stimulating effect.

The fourth class of cases benefited by the climate—and this is the main or largest class—is the class of chronic bronchitis, catarrhal phthisis, fibroid phthisis, etc.—cases in which a stimulant to the bronchial membranes is demanded. Atlantic City has among its store-keepers, hotel-keepers, and private residents, hundreds of people who have been cured here of chronic bronchitis—they will tell you "lingering consumption." This class is pre-eminently the class that receives the most benefit from the climate. Nor is this to be wondered at if we bear in mind the cardinal characteristics of the climate, to wit, the "lack of humidity," and "stimulation." The climate is a "sterile, dry air antiseptic" by virtue of the iodine, bromine,

chlorine and oxygen it contains, and a "stimulating expectorant" by virtue of the chlorids and bromids of ammonia with which it is laden; and this is particularly true of the ocean fogs, which are dry fogs. If one of these dry fogs occur, I always phone my patients with pulmonary troubles to keep out in them as much as possible, and I have never known a patient to "take cold" in one of these fogs. Temperature is of no importance in a climate; the great desideratum is the humidity. A cold climate, if it is dry, agrees with diseased lungs just as well as a warm one.

The fifth class of cases in which the climate of Atlantic City is indicated as a remedy, and the last I shall mention, are the cases of tubercular consumption. Not a few cures of undoubted cases of this dread disease, in the incipient stage, can be credited to Atlantic City. If such cases are sent here when there is early apical affection, and little constitutional disturbance, they often do remarkably well. Cases presenting consolidation but no excavation also improve. Or perhaps a case of early involvement presenting a small, quiet cavity might undergo repair.

Cases of hereditary predisposition seem to be the most promising ones, as I have studied them; probably because of the general constitutional improvement and resistance that obtains, together with the antiseptic qualities of the atmosphere, and the absence of humidity and comparative immunity from rapid oscillations of the temperature. One great factor in this class of cases is the universal fashion here of living out-of-doors. People congregate at the hotels only at meal times. After meals everyone goes out-of-doors. It's the fashion. And "the fashion" is so hard to resist. The proclivity to go with the crowd develops very early in life.

Lastly, to wind up this paper, having told you the classes of cases in which the climate is indicated as a remedy, I am going to say a few words about the classes of cases that do not do well here. These are:

a. Distinctly! any case with a tendency to hæmorrhage, be it from the nose, the throat, or the bronchia. We send them away at once. The dry, stimulating air will increase and perpetuate the tendency to hæmorrhage.

b. Cases of well-marked or advanced tubercular phthisis do

not do well; force and energy is communicated to the disease, and the stimulating effect of the climate will quicken the destructive processes into a gallop; all the sinister symptoms will be increased; cough, expectoration, hectic, embarrassed breathing, night-sweats, will all be aggravated. Such cases will do much better in the warm, *sedative* climate of the "pine barrens" of the interior of Southern New Jersey, or Asheville, N. C., or Thomasville, Ga., or some other similar sedative climate, which, while it lacks the stimulating, curative influence of Atlantic City, is conservative of all the vital energies. In such a climate the poor sufferer can be nursed, coddled, protected, taken out-of-doors in the warm, quiet sunshine in clear weather, and his life prolonged, long, long days after the climate of Atlantic City would have killed him.

c. Another class with whom the climate of Atlantic City does not agree, and in which it is contraindicated, is certain cases of *dry* bronchitis and asthma (often of gouty origin, but not always, I have observed), who need a *moist* climate. The dry, stimulating air of Atlantic City is irritating to them, and provokes cough, and aggravates their oppression of breathing. The warm, humid climate of Florida does much better for them. I know one such case who always suffers all the time he is in Atlantic City, with a dry, teasing cough, and a band-like constriction and oppression of the chest, and yet who lives in perfect comfort in Charleston, South Carolina, or St. Augustine, Florida.

THE TREATMENT OF TYPHOID FEVER.

BY WILLIAM W. VAN BAUN, M.D., PHILADELPHIA.

(Read before the American Institute of Homœopathy at Buffalo, N. Y., June 25, 1897.)

WHILE typhoid fever continues to exist its treatment will possess a perennial interest, but there is nothing new or startling to offer in this connection. The homœopathic method continues an excellent sheet-anchor, nearly sufficient in itself and vastly superior to any other known *system of medication*. Founded strictly upon scientific principles, it is ever expanding but unchangeable—the same yesterday, to-day, and to-morrow.

—and is successful in the highest degree within the limits of its proper employment, the mortality ranging from nothing to seven per cent., depending upon the class of cases treated, plus the ability for exact application possessed by the prescriber. The treatment of typhoid fever, however, includes much beside prescribing the homœopathic remedy, which may be any one of the remedies found in a first-class materia medica; and a recital of the methods employed in the treatment of this disease will not be without service, and will lead up, no doubt, to an interchange of thought and opinion that cannot help but be beneficial.

Typhoid fever being a self-limiting disease with a tendency to recovery in the majority of cases when taken early and treated in bed, with good environment, the mortality as a rule will not range more than seven per cent.

Excepting the rare and unique cases—the so-called abortive type—the advent of typhoid fever means a two to four weeks' struggle, upon the part of the patient, with continued fever, great mental, nervous and physical prostration, with restlessness and delirium, and the usual train of symptoms arising in a body with every physiological function deranged and out of gear.

The cardinal principle governing treatment is to conserve the strength and to reserve in the highest degree the vital force of the patient. This demands rest—as near a condition of perfect rest as can be reached; diet of an easily sustaining character, and stimulation for the overtaxed organs and tissues. If success is to crown our efforts in bad cases, rest and quiet must be obtained for the highly wrought nervous system, which is so often in evidence during the second and third week of this disease.

Enteric fever in its mildest form is always to be looked upon and treated as a serious disease, and the *general management* of a case is the first step claiming consideration.

As soon as suspicion of typhoid is awakened the patient is to be ordered to bed, in a large, quiet, airy, well-ventilated room, with a subdued light and without much furniture, a screen being necessary to protect the patient from drafts. The apartment is to be without hangings, carpets, etc., mats being used, or all-cloth slippers being worn over the attendants' shoes to

deaden sound. Two single or three-quarter bedsteads in the room are often of great service for changing the patient from one bed to the other, especially after wet-packing, etc. The woven-wire bed with soft-hair mattress, with mackintosh or rubber-cloth under a sheet, makes a bed of ideal smoothness and elasticity.

The patient is to be lightly covered, and the temperature of the room is to be kept between 60° and 68° F. In hot weather this temperature can be maintained by wringing cloths out of ice-water and stringing them across the room on light wire or rope.

A great desideratum in the management of a case is an intelligent, tactful trained nurse, for much depends upon the constant skilled care of the attendant.

All direction should be specifically given in writing regarding the diet, the medicine, the treatment of the discharges, the bedlinen, and whatever else may present; and a special record is to be kept and furnished the physician of the temperature, pulse, respiration, stools, food, baths, medicine given, etc.

The patient is not to be allowed to get up, the use of the bed-pan and urinal being especially insisted upon; the guiding rule being as little disturbance as possible. Frequent examinations are to be avoided, and particular care is to be exercised in handling the right iliac region.

The occasional change of position of the patient will tend to avoid hypostatic congestions and sloughs from pressure. Especial care is to be taken to prevent bed-sores by perfect cleanliness and smooth bedding. The nates are to be washed frequently with dilute alcohol, and as soon as erythematous redness appears the air-cushion is to be used, and the parts are to be dusted with boric acid, subnitrate of bismuth, or salicylic acid and prepared chalk.

From the beginning it is of advantage to bathe the entire body, night and morning, with water, or water and vinegar, at 85° to 90° F. This will not chill or distress the patient, and, later, a much lower temperature can be used with impunity, as the patient gradually gets accustomed to the colder applications. The sponging seems to have a decidedly beneficial effect, especially when the patient is rubbed dry with a coarse towel. The bathing aids elimination and perspiration, and friction is a

reliable nerve stimulant. The result usually obtained is a fall in temperature, the dryness of the skin so often complained of is relieved, and sleep is induced.

Mouth cleanliness is essential, and a mouth-wash of one part alcohol, two parts glycerine, and three parts water, will be serviceable. Sordes on the teeth are to be carefully removed. Neglect of these precautions may lead to parotitis or otitis media, or ulceration of the soft palate may appear.

I recently met with two cases of ulceration in the mouth, the ulcers affecting the anterior pillars of the fauces in one case, and the surface of the soft palate on each side in the other. The ulcerations were superficial, oval in the former case and round in the latter, covering on each side an area the size of a "quarter." The edges were regular and not undermined; there were no symptoms excepting dryness of the mouth; the ulcerations remained indolent, and appeared to run a course with the intestinal lesions.

A typhoid patient should never be left alone. A recent experience emphasizes the necessity of enforcing this rule of procedure. A lady of 28, convalescing in the fourth week, was left alone fifteen minutes; she had not yet been sitting up. An inclination for a bowel movement suggested the commode, some ten feet from the bedstead. She succeeded in getting to it; feeling faint, she attempted to return, and fell heavily to the floor. Symptoms of collapse soon set in, which were followed by a large hæmorrhage six hours later, death supervening in twenty hours from a second profuse hæmorrhage.

If active or violent delirium be present, the patient is to be restrained with gentle firmness. Strapping, jacketing, or other restraint is not advisable. If urgent measures are needed, a tightly-drawn sheet is sufficient. In such cases it is well to take steps to prevent a window escape by placing heavy furniture in front of the windows, or by arranging the sashes so that they cannot be opened more than six inches.

The necessity of proper disinfection of typhoid discharges should be impressed upon the attendants, and written directions should be left with those in charge. Chloride of lime being a reliable means, and always easy of command, should be recommended as follows: Six ounces of a good preparation should be mixed in one gallon of water, of which one or two

pints is to be used with each stool or vomited matter, and allowed to stand one hour before throwing into the water-closet. Burying typhoid stools before thorough disinfection is a reprehensible practice, leading to soil-pollution.

Diet.—The diet should be fluid, nourishing, and easy of digestion. It should be given every two to three hours, in measured quantities of two to three ounces. Night-feeding will depend upon the condition of the patient. In mild cases sleep is not to be disturbed; but when stupor is present the patient is to be regularly aroused every two to four hours, both day and night. The first sleep following a prolonged insomnia is not to be interrupted for some hours, being governed by the general condition and the pulse.

The digestive secretions of the patient all being diminished, and the intestines ulcerated, it requires a nicety of selection to secure nourishment that will be easily digested and assimilated.

Milk becomes the principal reliance, but not necessarily the exclusive diet. When it is well borne, and the stools show no curds, it may be the sole diet, and can be given in quantities ranging from two to four pints in twenty-four hours. When it proves troublesome, it can be diluted with lime, soda or Vichy water, or it may be given in weak tea, custards, whey or junket, beaten up with egg, or it may be peptonized, for artificial partially digested food gives the digestive organs less work, and digestion, absorption and assimilation are more readily accomplished. Again, it may be served with arrow-root, or in the form of buttermilk, matzoon or koumiss.

If the stools show masses of milk-curd, or if microscopic examination reveals abundance of fat-globules, substitute, in part or altogether, for a time, mutton- or chicken-broth, or beef-juce, or even beef-tea, which can be made palatable by the addition of fresh vegetable-juices which have been well cooked and thoroughly strained. Where variety is needed, a well-strained, thin barley-gruel, which has been cooked for hours, can be given. Gelatine will help out at other times.

If it is necessary to withdraw food in bulk, albumin-water, prepared by straining the white of eggs through a cloth, and mixing with an equal amount of water, and flavored with lemon-juice, or given with whiskey or brandy, will sustain life for some days.

Overfeeding will be shown by symptoms of gastric distress, increased diarrhœa, and the presence of fat-globules or curds.

In cases of persistent diarrhœa, an hourly dose of one drachm of burned brandy to an ounce of whey will do good service.

With the advent of convalescence comes the clamor for food with the return of appetite. While the greatest care is to be exercised, a gradual return to semi-solid food is to be encouraged, provided the night and morning temperature has remained normal for a week or ten days, and diarrhœa and tympanites have been absent for a similar length of time.

Fruits, as a rule, are not allowable, especially those containing seeds, although the juice of an orange or lemon may be given; and occasionally grapes, with skin and seeds removed, are greatly relished by the patient, and they will often clean up a coated tongue. Meats are to be forbidden until convalescence has been well established for two weeks, for slight indiscretion in diet may readily cause a return of the fever.

Drinks.—Good, pure water given freely and frequently is the best beverage for a typhoid. If the supply is questionable, the water should be boiled. As the mental state of the patient is often one of indifference, the nurse should not wait for the patient to ask for water, but serve it frequently at regular intervals. If the appetite stales, then coffee, tea, orange-juice or wine may be added. Fruit-syrups of all kinds are to be avoided, as they tend to give rise to flatulence.

Some authorities advocate the drinking of large quantities of water—from five to six quarts daily—claiming excellent results, the fever and nervous phenomena being reduced to a minimum. I have given four quarts daily without apparent results.

Stimulants.—The question of stimulants in typhoid is an important one. While in many quarters there is a decided objection to their use at all, and while there is a valid objection to their routine administration, when a case of enteric fever presents a weakened heart-beat, the first sound being obscured, with a feeble, irregular pulse, high fever, and general systemic weakness, it is time for stimulants: and whiskey, brandy, Burgundy, claret or champagne should be given in repeated doses, being governed by results, the quantity depending upon the age of the patient and the gravity of the symptoms.

Whiskey is the most serviceable stimulant, and is used in doses ranging from one drachm to two or three ounces every three hours, even if alcohol neuritis is produced, two to eight ounces daily being the rule.

Patients over 40 years, and younger people previously intemperate, should receive alcohol in small quantities early in the disease, during the first week, increasing more or less rapidly according to indications, giving in well-diluted, frequently-repeated doses rather than in large doses at infrequent intervals. Tipplers should have their liquor in good quantities from the very beginning, continuing it to the end of the disease. It is well to remember that the night and the early morning hours usually find the patient weakest and the need for stimulation greatest. Alcohol is called for when, from any cause, sufficient nourishment cannot be taken to sustain the system until the crisis is past. Sometimes artificial food preserved in alcohol will be sufficient; this is seldom the case, however.

The profound typhoid state, with its alarming dulness, apathy and muttering delirium, with the dry tongue and sordes, the tremor, jactitation, subsultus tendinum, the muscular rigidity, the weak, wavering pulse, the shallow breathing, the high or low temperature, with a dry or moist skin, make up a profound appeal for stimulation to sustain the circulation and failing system and tide it over the impending crises, and sometimes it is necessary to give an ounce of whiskey hourly for several days to accomplish the end desired.

Excessive stimulation is always to be considered carefully, and the results are to be closely watched. If improvement sets in it will be shown by an improved general tone, by a better pulse, a lessening delirium, a gradually moistening tongue, and decreasing nervous phenomena. If these signs appear, then the alcohol is doing good. If, on the other hand, they do not occur and there is a steady change for the worse, then doubts must arise as to the advisability of continuing its excessive administration and the necessity for a gradual withdrawal appears.

Excessive nervous exhaustion, with or without insomnia, and impending heart failure call for moderate stimulation. The heart in particular is a sufferer in enteric fever, arising from the gradual undermining of its muscular structure and the

constantly increasing deficiency of innervation, and from other reflex irritations.

All serious complications sapping the little vitality that is left, like pulmonary œdema, congestion, pneumonia, pleurisy, bronchitis, and persistent and recurring diarrhœas, and the collapse and anæmias of hæmorrhage, need the support of stimulants.

Cases of albuminuria, or of recurrent hæmorrhages of the bowels or kidneys, or where the urinary secretion is much diminished, tend to counter-indicate the free use of stimulants, and at times they have to be withheld.

As soon as the desired effect is obtained in any case, as indicated by the pulse becoming stronger and slower, and the other symptoms improving in proportion, then the large quantities of alcohol should be reduced. The rule governing stimulation is, that alcohol should never be used unless needed, and it should never be withheld when called for by the exigency of the case.

The question of *medication* is now in order, and it will be well to realize that with good general management, carefully selected diet and drinks, and with stimulants judiciously applied, nearly 93 per cent. of all typhoid cases will get well.

Homœopathic medication will raise this percentage, will ameliorate the severity of the symptoms, and will tend to shorten the duration of the illness. Being before an audience of experts in homœopathic materia medica it will be unnecessary to name and review the indications of the drugs at our command, which have been so admirably set forth by Raue in his *Therapeutics*, and with which you are all quite familiar, so we will consider briefly some of the special symptoms of typhoid fever and the means at hand for controlling the same.

Fever.—From the homœopathic standpoint it is impossible to divorce fever from the general symptom group, as the drug-selection must necessarily depend upon the totality. The fever is characterized by the associate symptoms, those of the heart and nervous system being of first importance.

When the temperature does not exceed 102.5° in the beginning *bryonia* will be the remedy, and if the progress of the case is favorable it should be repeated at lengthening intervals until the end of the third week, when it should be withdrawn.

If the symptoms point to *baptisia* it can be relied upon to do

good work, but I have never seen it abort a case of typhoid, as has been reported. *Gelsemium* can be used with confidence when the prostration is early in the disease and marked neuralgic symptoms are present.

When the fever is not high, *cuprum* or *phos. ac.* is called for; and when nearly normal, *helleb.* When there is heat or sweat, during which the patient wants to be covered, *hepar* and *rhus tox.* are indicated. If there is heat of the trunk, with cold perspiration of the extremities, *phosp.* is to be looked to; and so we can meet nearly every conceivable symptom with great nicety and with admirable results. But cases will come in which the high temperature persistently goes higher, the delirium increases, the stupor grows deeper, and the heart wavers to failure, all suggesting a reduction of temperature if life is to be saved. Antipyretics at best are a forlorn hope, and simpler methods are to be tried first—such as surface reduction of temperature from the mere exposure of the cutaneous surface to the atmosphere, to cold sponge bathing lasting fifteen to twenty-five minutes, being careful to use a small amount of stimulants before and after the cold sponge. This procedure will sometimes result in a reduction of one to two degrees in the temperature, which is often sufficient to bring it within a safe range. If not, a resort to the cold-water bath will be advisable, but it is not to be used late in the disease.

Hydrotherapy to-day is supreme. The cold bath in enteric fever was first recommended by Currie, of England, in 1787, but soon fell into disuse, owing to an imperfect technique and a general aversion to anything out of conservative lines. In later years it was used by hydropathic specialists alone, until Brand, of Stettin, in 1861, showed with its use a mortality much less than that obtained with any system of medication by the most skilled clinicians of Europe, excepting those of the homœopathic school.

In recent years his cold-bath treatment of typhoid fever, more or less modified, has been received with great favor, although, at present, the tide of its popularity seems to have reached its height. It unquestionably has a field of usefulness, and it is worthy of most careful consideration.

Brand's method is to give a bath as soon as typhoid is diagnosed whenever the rectal temperature is over 102° F. (This

seems unnecessary, for many cases of typhoid under homœopathic medication run a short, mild course, and get well without the temperature going above 103° F., and the bath method is a decidedly disagreeable one.) Before putting the patient in the bath the face and chest may be sponged with cold water, to lessen the shock, and if weakness or exhaustion is marked, stimulants are administered in some form. The temperature of the bath varies from 75° to 65°. The water should never be below 65°. The principle governing the use of the bath should be to reduce the temperature of the body to the point desired, with the water as warm as possible. The bath two-thirds full of water, is placed close to the bed and the patient is gently put into it, so that the water will cover the chest, the back and head being supported by (the ordinary) rubber cushions filled with water, a sheet being folded around the loins. The head, excepting the face, is covered with cloths wrung out in cold water, and cold water is applied to the head every three to five minutes. While immersed, every portion of the body excepting the abdomen must be rubbed and chafed. The *friction* is an essential part of the bath, as it prevents chilliness, cyanosis and collapse. While in the bath the patient is expected to drink some cold water. The immersion lasts from ten to twenty minutes, when the patient is lifted gently on to the bed, the wet clothes are removed, he is hurriedly dried, excepting over the abdomen, lightly covered, hot-water-bottles are placed to the feet, and some stimulants are again administered, preferably hot water and whiskey. This will prevent or check any tendency to chill and cyanosis, which otherwise are apt to develop in about ten minutes after the bath.

During the bath the patient must be carefully watched, and repeated assurance of its helpfulness will do much to overcome the patient's nervous apprehension. At first chilliness is almost always complained of, but it soon passes away. If it should not, and the teeth commence chattering, with beginning cyanosis, the patient must be immediately removed, dried and stimulated.

In the bath, with the fall of temperature shivering commences. If the pyrexia is very high it is advisable to continue the bath, together with the violent rubbing and friction of the chest and limbs, for some minutes longer.

After the bath nourishment is given, and the patient usually falls into a gentle and refreshing sleep. If this is not the result, Brand then applies compresses wrung out in cold water to the chest and abdomen. Half an hour later the rectal temperature should show a decrease of 1° to 3° F., and the loss of heat should be accompanied by a lessening of delirium, tremor, subsultus tendinum, insomnia, and all other nervous phenomena, together with an improved tone of the circulatory system.

In two or three hours, if the temperature again exceeds 102.5° , the bath is renewed. Brand has given eight baths in twenty-four hours. Four to six is the usual number.

Brand's method has been varied in many ways by different authorities. One recommends that there is less shock and better general results if the temperature of the bath is 90° F. on immersion of the patient, and gradually lowering it to a minimum of 72° by adding water at a temperature of 40° , care being used that the cold water does not fall upon the patient.

In cases of threatening syncope, or in difficulty of breathing arising from emphysema or laryngeal complications, or in profuse sweating, it is suggested to place the patient in a warm bath, 100° F., and to cool the water gradually by the addition of pieces of ice; and Barr* has a method for a prolonged immersion in a tank-bath, at a temperature of 90° to 98° , the patient being kept in the bath from six to thirty-one days, passing all discharges into the bath. He reports excellent results.

A correct estimate of the cold-bath treatment indicates that it lessens the mortality, in comparison with the usual old-school rates; that it mitigates the severity of the symptoms and shortens the duration of the disease; that it does not prevent relapses or offer any escape from or obstacles to the complications of the disease.

The claim that relapses and severe complications are more commonly found with this method of treatment has not been established.

Pneumonia, bronchitis and pregnancy are not contra-indications. In fact, there are no serious disadvantages, but as a curative measure it is a decidedly disagreeable one to the average patient, and in private practice it is difficult to carry out.

* *Lancet*, vol. i., 1890, p. 690.

In most cases I have found cold-water sponging, going slowly over the entire surface of the body, commencing with the legs, then the arms, and finally the trunk, to reduce the temperature to a safe limit, often producing a fall of two degrees; and, on the other hand, I have seen cases where the cold-water bath and the ice-pack were of no avail, the axillary temperature in one case being 106° and in another 107.6° .

In cases of hæmorrhage or peritonitis, or late in the disease, especially if there is a marked cardiac weakness, the bath is of no service.

In bathing the temperature should not be reduced below 102° . It is to be borne in mind that high temperature of itself seldom kills, and that it is one of the natural expressions of the disease; but at the same time this does not justify inaction when the temperature is ranging and maintaining itself at a dangerous height.

If the bath is not available, and the temperature remains persistently high without hæmorrhage, ice-cold water carried high up into the descending colon by means of a skillfully applied long rubber rectal-tube, in quantity from two ounces gradually increased to ten, repeated every two, four, eight or twelve hours, has been attended by highly gratifying results, the temperature coming within safe limits in a comparatively short time.

Antipyretics as a class are to be viewed with disfavor. The mere lowering of temperature is not sufficient, and does not mean an improvement. The general tendency is to discard their use and to condemn the antipyretic hammering down of the fever; and yet this probably arises from an abuse of these drugs rather than from their proper use. They should be reserved as emergency drugs, and when all else has failed they will sometimes help out. They should be given in small doses of one to three grains, repetition being governed by the results, the temperature never being forced below 103° F. A case of typhoid treated with a combined homœopathy and moderate hydropathy will seldom call for any other resources.

Epistaxis.—Nosebleed at times assumes an importance that calls for special consideration. The remedies suggested by the conditions are: Early in the disease, *bry.*, *bell.*, *gels.*; late, *arn.*, *rhus tox.*, *lach.*, *phos. ac.*, *carbo veg.*, *secale* and *sulph.* If these do not quickly control, other measures are to be resorted to, for in

a weakened, exhausted condition, even small hæmorrhages may become dangerous. The best local means at command is ice to the nose, forehead, and nape of neck, or insufflations of alum or tannic acid, or syringing the nares with lemon juice, or, finally, surgically plugging the anterior and posterior nares.

Headache in the early stages is often very distressing. *Belladonna* is very useful in controlling this symptom; when associated with acute delirium it is more strongly indicated. If the headache is accompanied with pain in the back and limbs, *gels.* is called for; and if marked languor and tire be present, which opening the eyelids or moving the balls aggravates, *bry.* or *rhus tox.* is suggested, and *colchicum* will help where the headache is associated with delirium; and when it is especially bad and unyielding, *spigelia* will bring the needed relief; if not, and the nervous phenomena is being greatly aggravated, then *morphia* should be tried.

Constipation in order of frequency stands out prominently in the special symptoms of typhoid, and the tendency is to neglect the condition. *Bryonia*, as a rule, will be sufficient, or *nux vom.*, *opium*, *lycopodium* or *hyoscyamus* may be called for. If three days should intervene without a bowel movement, it is advisable to relieve with a gently applied sixteen-ounce soap-and-water enema. This will soften the mass and stimulate the bowels to action, while large enemas tend to distend the bowels and set up active peristalsis. Sometimes the white wheat gluten suppositories are sufficient.

Notwithstanding the reported cases of constipation lasting twenty to thirty days, with a final natural gentle movement, it is necessary to recognize that fæces retained many days irritate the bowels, increase the catarrhal condition higher up, aggravate the intestinal symptoms in general, and tend to elevate the temperature.

Vomiting in the beginning indicates gastric irritation and suggests variation in the dietetic measures. Very hot water in quantity by teaspoonful doses, or small lumps of ice swallowed will usually be sufficient. If associated with retching, *ipee.*, *ars.*, *secale*, *ver. alb.* or *phos.* will be called for, the latter being of use if it is of slimy, bilious masses, with great pain.

Diarrhœa is a symptom of great frequency. If the stools do not exceed two or three a day, and are not large or liquid, there

is no cause for uneasiness. Still, they demand attention in the selection of a remedy, so that they may be prevented from draining the system too much. If an examination of the stools should reveal evidence of undigested food, especially if curds are present during a milk-diet, a change of diet is called for at once, or the quantity of milk must be curtailed, or its preparation before administering must be altered, and such remedies as *apis.*, *arn.*, *ars.*, *colch.*, *hyos.*, *opium*, *rhus. tox.* and *verat. alb.* will be needed. In making a change of diet it is to be remembered that strong beef-tea may set up an irritant diarrhœa.

In rare emergencies deodorized laudanum per rectum, 20 to 30 drops in starch-water, may be useful, as it tends to diminish peristalsis in the large intestines, and from the fact that the diarrhœa may be due to a catarrh of the large bowel rather than to the ulcerated state of the small intestine.

Hæmorrhage from the bowels is a symptom of grave import, especially in the latter weeks, if it is profuse or frequent. Slight evidence of blood is present in nearly all cases if the stools are examined carefully. At times small hæmorrhages appear to be of no moment, or may even seem to be beneficial, but blood in quantity is a danger-signal, and calls for special attention and care.

Absolute rest is to be instituted. To obtain this a fold of cloth is to be used instead of a bed-pan. This will avoid movement. The patient should suck ice, and the food is to be administered cold, and ice-water injections have been successfully used. *Terebinthina*, *nitric acid*, *hamamelis*, *china*, *phosphorus*, *hydrastis*, *millefolium*, *geranium* and *ipecac.* in the order named, have done good and faithful service.

If the case becomes alarming from the frequency and profuseness of the hæmorrhage, and homœopathic remedies do not control, *ergotin*, one to three grains subcutaneously, is probably a good hæmostatic, and under these conditions is worthy of trial; my own experience with it has not been satisfactory. Morphia sulphate, in a quarter of a grain dose hypodermically, is of advantage; for by controlling restlessness and nervousness it is beneficial, and by arresting peristalsis it acts as a surgical splint.

The profound anæmia which accompanies or follows profuse hæmorrhage may be relieved by subcutaneous injections of

ether, and, when collapse threatens, by large quantities of normal salt solution injected into the tissues or veins, together with stimulants given freely with strychnia.

Tympanites is often an annoying and troublesome symptom. Once established, it is apt to continue until convalescence is well advanced. It is suggestive of deep intestinal sloughing or of unhealed ulcers. For relief we depend upon *apis.*, *arn.*, *ars.*, *carbo. veg.*, *china*, *colchicum*, *lycop.*, *phosph.*, *phos. ac.*, *opium*, *rhus. tox.* and *turpentine*. If these fail, other measures must be instituted. Tympanites arises occasionally in the small intestines, but the colon is the usual seat, and when extensive ulceration is existing in this locality the danger of perforation is great.

When tympanites becomes extreme it causes great distress by pushing the diaphragm up and embarrassing the heart and lungs.

The application of ice to the abdomen has been helpful, and turpentine enemata have given decided relief. The excessive development of gas may be due to decomposition of food and morbid secretion, in which case special attention must be given to the diet.

If relief is not obtained by these methods, then a catheter introduced into the rectum will do so; if not, a long, soft-rubber rectal tube should be passed high up into the colon. If resistance is offered, a small amount of water carefully injected through the tube will clear away the obstruction ahead to the advancement of the tube.

This is a temporary expedient, or the gas may only escape from the descending colon, while the transverse remains alarmingly distended. If the distress is very great, or if the gas has escaped into the peritoneal cavity, aspiration is suggested, and in such a case the temptation to use an aspirator or hypodermic needle is great, but it is seldom, if ever, justifiable; for there are cases on record where feces have escaped into the abdominal cavity after the use of the needle, resulting fatally from septic peritonitis.

The abdominal pains which so often accompany marked tympanites are the result of the excessive distention, or to localized peritonitis, which is not infrequent.

Peritonitis, unless circumscribed, is fatal as a rule, whether it be due to perforation, or to septic poisoning from the base of

an intestinal ulcer, or to an adjacent abscess. It is due in the majority of cases to perforation. *Bry.*, *ars.*, *phosp. ac.*, *rhuis tox.* and *turpentine* are useful *remedies* in the condition, with rest in bed and cold to the abdomen. Only a limited amount of nourishment is to be given. If collapse is impending heat should be applied to the feet and legs, and strychnia, morphia and ether should be given hypodermatically; doing everything possible to sustain life and relieve pain, trusting that adhesions may form.

Perforation is an accident of terrible import, and calls for care similar to that described under peritonitis. The pain, restlessness, agony and distress which so often follow must be relieved, and opiates used simply to the degree of obtaining this end are advisable. The control of peristalsis may tend to limit the perforation by adhesive peritonitis. The indiscriminate dosing with opiates is attended with serious disadvantage, and is to be discountenanced.

Heat, dry or moist, applied locally, will lessen pain, and if used in the form of a poultice, one or two drachms of equal parts of turpentine and sweet oil will be palliative.

In cases of convalescence with a low or normal temperature, with good nutrition, digestion and increasing strength, the oncome of perforation is suggestive of cœliotomy with a view of three possible procedures: first, suturing at the sight of lesion; second, resecting the bowel at seat of perforation; or, third, to attempt an anastomosis between uninvolved portions of the intestines, together with the proper treatment of a septic peritonæum. Of course such treatment would only be justifiable in cases where the above conditions prevailed, and only then because multiple perforations are exceptional.

Insomnia.—Inability to sleep, with its train of nervous phenomena and the associated depressing influences, is a troublesome condition, difficult to overcome and guide aright. *Belladonna* is helpful, whether the patient is sleepy and cannot go to sleep, or not. Sometimes the peculiar symptom of *baptisia* is present—sleepy, but cannot go to sleep, because he cannot get together, his head feeling as if it was scattered about. On one occasion I met this condition, with other symptoms of *baptisia*, and the remedy was used with some benefit.

Hyos., *arum trip.* and *mur. ac.* are useful when the delirium

seems to keep the patient awake; and where the mind in its state of overactivity arouses the invalid as soon as sleep comes, with the same idea recurring time and time again, *calc. carb.* soothes and brings the needed relief.

Homœopathic therapeutics usually control the distressing wakefulness, but if it should not do so something must be done to overcome the constantly increasing nervousness, with the dire results in its train. I have found *calcia* in $\frac{1}{4}$ to $\frac{1}{2}$ grain doses useful, whereas *sulfonal*, which is highly recommended in x. to xv. grain doses, has been useless.

Morphine has occasionally been resorted to. It has a profound and striking effect upon the nervous system, its tendency being to lessen the restlessness and wakefulness, and in the later stages of typhoid it controls admirably the delirium and twitching, appearing also to lessen the depression of the central nervous system.

If the stomach is tolerant I have succeeded in getting the desired results by dissolving one-sixth or one-quarter of a grain of morphia sulphate in ten teaspoonfuls of water, and giving one teaspoonful every half-hour until the patient is sleeping.

If mania prevails and the well-tried remedies fail, hypodermic injections of *hyoscin* have a quieting influence.

Chloral and *bromide* act well, provided the heart is not weak.

Delirium.—Homœopathic medication seems to be peculiarly adapted to the treatment of the delirium of typhoids, whether active or somnolent. The various shadings are all wonderfully covered by our materia medica, whether it be the attempts to get out of bed, to go home, to escape; or the laughing, incoherent talking, singing, screaming, swearing, sighing or muttering; the picking at bedclothes, catching at flocks or playing with the hands—or if the very opposite is present, the patient keeping silent, refusing to talk—even apathy; or fear, apprehensiveness, anxiety, hopelessness, or despair be the controlling factor: or impatience, irritability, bad humor, quarrelsomeness, or rebelliousness; be the shading what it may our remedies are at hand, demanding only accuracy of adjustment in the selection to bring the desired relief. Our results are second to no other method.

Ars. alb., *agaricin*, *apis*, *arn.*, *bell.*, *bry.*, *baptisia*, *cal. carb.*, *canth.*, *china*, *coccul.*, *colchicum*, *gels.*, *hyos.*, *igu.*, *lach.*, *lyc.*, *mur.*

vom., *nux mosch.*, *murc. ac.*, *opium*, *phos. ac.*, *psorinum*, *rhus tox.*, *stram.*, *sulphur*, *taraxicum*, *ver. alb.*, *ver. vir.*, *zinc*. This list comprises the old guard of homœopathy, and when applied early and intelligently recourse to other measures will seldom be needed.

As palliative measures, ice to the head and a hot mustard foot-bath are simple expedients which may bring relaxation and quiet to the tense mental and nervous systems.

If struggling should be present, the attendants' resources will be taxed to the utmost, for mechanical restraint should never be allowed. Straps and strait-jackets are a confession of weakness and lack of resource on the part of the patient's attendants, and will do the case much harm.

It is judicious at times to indulge the patient by permitting him to sit upon the side of the bed for a few minutes, or to let him get up on his feet and sit in an easy-chair placed near the bed, being prepared to meet the sudden collapse of the delirious restlessness. With its onset the patient will sink back into a more quiet state, and much less harm is done than would arise from violent struggling for release from the straps or jacket. When absolute restraint becomes necessary it can be accomplished by passing a strong sheet over the body of the patient and fastening it all around the bed, leaving the patient's head out. This will be all-sufficient. When so arranged, the patient must never be left alone.

Heart weakness, indicated by feeble pulse, loss of the first sound of the heart, irregular action, etc., is due usually to degeneration of the myocardium, the change in the muscular fibres being associated with similar changes in the bloodvessels and the general muscular system—expressed by general prostration and impaired innervation. This condition prolongs the attack and calls for alcoholic stimulation, *strychnine*, *agaricin*, *digitalin*, *strophantus*, *glonoin* or *caffèine*. As a rule, heart-failure can be guarded against by the systematic reduction of excessive heights of temperature.

Bed-Sores.—With proper attention, bed-sores should not occur, and prevention is the better part of cure. Of course this does not hold good where they arise from minute thrombi carried along the blood-current. Too continuous pressure on prominent parts is to be avoided, and the skin is to be kept

clean and dry. The patient is to be turned from side to side and propped with pillows, and with the first sign of a sore the water or air-bed is to be substituted for the mattress, if possible. When there is cause for alarm, the skin of the buttocks and exposed parts should be washed twice daily with soap and water, followed by bathing with boric acid solution or alcohol, pure or with alum. Sometimes an ointment, like boric acid or zinc oxide, will do better. If sloughing commences, antiseptic and stimulating dressings are called for, such as carbolic acid (1 in 50), compound tincture of benzoin, balsam of Peru, or a solution of formalin, the gauze packing being protected by rubber tissue. Large sloughs should be first dusted with iodoform, subiodide of bismuth or aristol, and then protected.

The complications and sequelæ, such as pneumonia, incipient phthisis, pleurisy, nephritis, periostitis, etc., hardly call for review here.

The *convalescent* period is one of anxiety. The lesions of enteric fever being characteristically slow in healing, the progress of the patient must be carefully watched, and specific directions are to be given for the general management and diet of the patient.

Continued rest is an important factor, for danger of perforation is still present. The patient should remain quietly in bed for a week or ten days after fever has disappeared, as indicated by the night and morning temperature, and longer, if cardiac trouble is present. If a slight rise in temperature continues for an undue period, and a careful search fails to reveal its cause, the patient is to be allowed to sit up, and often with this change of position the fever leaves.

With the return of appetite the patient will clamor for food, but the hungry cry must be met with discretion, for the slightest mistake will cause increased annoyance.

Excitement is not well borne at this period of the disease, and visits of friends are often followed by a rise in temperature.

With the advent of convalescence stimulation should be withdrawn as rapidly as possible. Later, a change of scene is very beneficial, but at least one month should elapse before permitting removal, in order to avoid a relapse.

EDITORIAL.

WM. H. BIGLER, A.M., M.D.

WM. W. VAN BAUN, M.D.

YELLOW FEVER'S LESSONS.

EXPERIENCE is a good teacher even if it, at times, does charge exorbitant fees for its instruction. The experience with the present comparatively mild epidemic of yellow fever is calculated to impress several lessons upon the public mind, and we may be thankful that the number of lives demanded in payment has been so small.

The first thing which strikes the unprejudiced observer is the proof afforded of the paramount importance attached to *diagnosis*, apart from everything else, in the medical mind at present. We are reminded of the famous diagnostician of whom it was asserted that he would rather verify a diagnosis by a *post-mortem* than cure the patient.

We see in the present case a long time spent in seeking to determine absolutely whether a disease, which resembled yellow fever so much that local experts could see no difference between them, was actually that disease or not. In the meantime, while an expert from the North was hastening down to the infected district to give an authoritative decision, the disease, gradually growing to an epidemic, was rapidly extending, without let or hindrance, because it had not yet been scientifically christened.

We fully realize the hardships of quarantine, and concede that they are not to be imposed lightly or without good grounds; but where, as in the present instance, a disease so closely resembling one, the terrible scourge of which ought to be still fresh in our memories, is rapidly increasing the number of its victims and disseminating its seeds in other communities through unobstructed intercourse, we think somewhat of scientific accuracy might have been sacrificed to the demands of protection, and at least a provisional quarantine established. Had even an error in diagnosis been made, the error would have been on the side of safety. The commercial

losses, too, resulting from such an error would have been trifling compared with those incurred in consequence of the delay.

A second lesson taught is the inadequacy of the present civil and uncivil ("shot-gun") quarantine methods. The apparent check opposed to the spread of the disease seems to be due as much to the lateness of the season in which it has occurred, and the mild character of the epidemic, as to the efficiency of the quarantine. The question whether this inadequacy of quarantine would be remedied by the substitution of a national quarantine for the several State quarantines could only be decided by a careful study of the faults which characterize the present system.

A third fact brought out, or at least emphasized, by the history of the spread of the disease is that in the presence of an epidemic condition, or, as we would call it, a *genius epidemicus*, disinfections are of comparatively little avail. The germ theory may be all right, but we are constantly brought face to face with a something back of and beyond the germ, a suitable culture ground (*Cultur-boden*) which offers a better field for our therapeutic efforts than do the germs themselves. So long as it remains manifestly impossible to be sure of having destroyed every single germ, it is far safer to render all soils unsuitable for their propagation. A reliable immunizing serum would, of course, be the ideal, and such, according to the latest accounts, has been prepared. We trust it will be made available before the occurrence of frost prevents it from having opportunity to substantiate the claims of its discoverer, Dr. Sanarelli. Another fact, also of rather a discouraging and humiliating nature, seems to have been brought out, at least according to the non-medical accounts which have reached us, and that is, that *no* treatment is regarded as of avail in this disease. Expectancy and a watchful, do-nothing policy seem to be advocated at present by the majority of physicians in the affected localities.

It is not to be wondered at that the public is beginning to feel that it can do without doctors, since there are constantly met so many who candidly confess their inability to do more than stand by and see that nature has a fair chance to do the work for which they are presumably paid. The patient in "ye

olden time" seemed to get his money's worth when the doctor, with his blisters and bleedings and nauseous drugs, routed disease, and left to nature only the task—usually a difficult one—of building up the weakened and empty shell of the disease-free convalescent.

We hope in time to hear a good account of the homœopaths in the infected region, and of the results of the homœopathic treatment. An epidemic of so mild a character, however, does not afford a favorable opportunity for a comparison of modes of treatment.

CAN TYPHOID FEVER BE ABORTED?

IN a natural and healthy reaction against an overweening confidence in heroic measures in the old school, as well as against the marvellous cures with infinitesimals in our own, the medical pendulum swung too far in the direction of skepticism, and it came to be regarded as a demonstrated dogma that the course of specific infections could not be interrupted; that, having been initiated, it was impossible to abort their full development. Having this doctrine established, as was thought, upon a theoretical and scientific basis, clinical facts were virtually disregarded, and all evidences of the falsity of the doctrine were unhesitatingly ascribed to faulty diagnosis and ruthlessly rejected. A disease having once been declared beyond the reach of medication, it was allowed to work out its destiny without benefit of the clergy; and, did some one have the hardihood to cure or shorten the duration of such a case, his diagnostic skill was impeached, and his mode of treatment declared to be utterly contrary to regular methods. The patient was not properly treated because he did not die *lege artis*. Perhaps in the case of no other disease has the impossibility of modifying its course by medication been more dogmatically and persistently taught than in the case of typhoid fever. But now comes along Dr. J. E. Woodbridge, of Ohio, who, first in a paper giving a new line of treatment, and then in a paper read before the Forty-Eighth Annual Meeting of the American Medical Association, maintains that typhoid fever can be aborted, and fortifies his position by an array of statistics not lightly to be set aside.

If we are willing to acknowledge that the benefits of the anti-toxin treatment of diphtheria have been demonstrated clinically by collective observation, then have we no right to doubt that Woodbridge's treatment is effectual in aborting this disease, and in materially reducing the rate of mortality. His figures are, 7827 cases treated by himself and others, friendly disposed and otherwise, with 150 deaths, or a death-rate of less than 2 per cent., and a duration of the disease of a trifle over twelve days.

We have here nothing to do with the treatment as such, nor with the question whether it entirely prevents the occurrence of complications, etc., but only with the fact that, if statistics mean anything, even allowing for possible errors, it has been proved that this disease can be aborted. This being acknowledged, we are prepared to judge more fairly of reports of similar success from other sources, which up to the present time too many of us have rejected as untrustworthy. If it has been done once it can be done again, and not necessarily with the same means. We have all, no doubt, had cases which gave every indication of being ready to develop into typhoid fever which we have aborted, but we have been willing rather to doubt our diagnosis than to think such a thing possible, contrary to the reiterated teachings of accepted authorities.

There are many such idols of medical dogmatism which will have to be overturned, and our only care must be to be sure that they are false idols before we take them down from their pedestals and relegate them to the junk-shop of medical history, already full of their predecessors.

IODINE IN TUBERCULOSIS.—Ayres, of Kalamazoo, in a discussion of the effects of iodine, recalls the fact that in *tuberculosis mesenterica* and the *marasmus* of children we have a picture of the morbid effects of that drug. It is doubtless through these glands that iodine produces its nutritive disturbance, and its power over these peculiar diseases is very marked and satisfactory. The resemblance between the symptoms of iodine and those of *phthisis pulmonalis* is another striking characteristic of this remedy. We have the pneumonia and hæmoptysis, and constitutionally the same action, including night-sweats, wasting fever and rapid pulse, cough, diarrhoea, vomiting, malaise, and in females amenorrhœa; but, unfortunately, it has not the curative power over consumption that it has over mesenteric atrophy.—*Medical Counsellor*, 1897.

GLEANINGS.

GLEANINGS FROM EUROPEAN CLINICS.

THE PREPARATION OF SURGICAL DRESSINGS.—Asepsin rather than antiseptin is the rule for surgical dressings in all the clinics of Paris, Berlin and Vienna. Steam at a low pressure is the agent employed for the dressings. Dry heat at a high temperature spoils the temper of the instruments, and now boiling them in soda solution is preferred. The gauze is prepared in strips, large and small pads, and as wads, to be used instead of sponges. These are thoroughly steamed, just before using, in perforated metal boxes made to close air-tight as soon as sterilization is completed. The dressings are so sorted and arranged in the boxes that any size can be removed without handling or uncovering the other dressings. I saw sponges used in only one clinic, *i.e.*, Pean's. The chief method of preparing silk is to wind it on reels in perforated metal boxes, boil it thoroughly, and use the silk direct from the closed box, to avoid handling the silk. Catgut has been abandoned by nearly all continental operators. Winckel used it in a case of abdominal hysterectomy for fibroids complicated with a large ovarian tumor. Olshausen of Berlin and Machenrodt still use catgut, but are particular to use selected gut. Jacobs, of Brussels, still finds formol the best agent for preparing silk or catgut, and also uses it freely as a disinfectant. His method of employing it has been detailed in previous gleanings. Drainage has been abandoned by nearly all operators. The rubber pad under the hips and the rubber sheet have also been laid aside as too difficult to disinfect. Simplicity in operations and but few instruments are also aimed at, as making asepsis more certain. Chloroform is the chief anæsthetic, though ether is more used than formerly.

FIBROID TUMORS OF THE UTERUS.—It has been hoped that some day surgery would find a way to remove these tumors as successfully as ovarian tumors, and that time appears to have come, but only for those operators who are very familiar with a variety of the most recent modern methods and who have a good knowledge of the anatomy of the pelvis. The pelvic tumor has as many variations or as many complications as the uterine fibroid, and no one method will cover all cases. The operator must aim to leave a pelvis clothed with peritonæum, and without any raw surfaces exposed. The operation must not be prolonged unduly, nor much blood lost; and, above all, the pelvis must be left aseptic, and in a condition to stay so. These are the principles of success, and from ninety-five to ninety-eight cases out of one hundred should recover, *i.e.*, the mortality-rate is less than in many common diseases, of which neither physician nor patient takes any serious account. There has been a very pronounced opinion in favor of operating on all fibroids. They do not disappear after the climacteric as often as has been believed, but remain a menace to the health and well-being of the unfortunate possessor. They are prone to malignant degeneration, and once a cancer has developed the fate of that poor woman is sealed.

ADENOMA AND POLYPII OF THE UTERUS.—These common diseases are now looked upon with more suspicion than formerly, particularly when they appear after the climacteric and recur after extirpation. Clinical experience has shown them to be often only preliminary to cancer, and a radical operation is necessary to avoid the danger. In younger women the former methods of treatment are employed, but the cases are watched carefully for any signs of trouble.

SERUM TREATMENT.—Every bacteriologist with a good laboratory thinks that a new field has been opened for therapeutic research, and often does not feel like wasting his time in teaching. The serum treatment of carcinoma, septic infection and pneumonia, is being tried, and Koch has a new tuberculin which promises something, but has not yet fully demonstrated its curative properties; indeed, the bacilli tuberculosis appear to have increased rather than diminished from its use. Some benefit is claimed for the pneumonia serum, but the serum treatment for carcinoma and septicæmia has resulted in absolute failure.

THE BACTERIOLOGICAL DIAGNOSIS OF TYPHOID FEVER.—Typhoid fever often appears with other than the classical signs, and the most acute diagnosticians are at times deceived. Bacteriology has brought another practical demonstration of its importance in giving us a most valuable means of diagnosing typhoid after the sixth day. It is also interesting that the characteristic reaction, which is very delicate, can be observed in some cases many months after the patient has recovered. Widal's reaction, which is an agglutination of the bacilli in the field of the microscope, is so well known as not to require a detailed description here; but as it is believed agglutination may occur with other serums, the diagnosis should be confirmed by a bouillon culture, which is proof positive if the characteristic changes are found. All this can be determined within twenty-four hours, and sometimes in five or six, and is one of our most important means of diagnosis wherever a bacteriological laboratory exists. A practical illustration of it occurred during my laboratory work. A man was brought to the surgical clinic in a semi-delirious condition, with the history of a fall on the head. The case was diagnosed fracture of the base of the skull. A few days later the autopsy showed unmistakable typhoid fever, and the blood serum afforded abundant evidence from a bacteriological standpoint.

RETRO-UTERINE DISPLACEMENTS.—Alexander's operation of shortening the round ligaments has been a favorite operation, but its uncertainty and unfortunate sequelæ have made many doubt the wisdom of performing it who have had abundant opportunity to follow up the cases afterward. The more progressive operators, as a rule, have abandoned it in favor of some of the operations from the vagina, such as the shortening of the round ligaments from below by Wertheim's method, a modification of utero-vaginal fixation, or the new operation of Mackenrodt, in which he sews the peritoneum of the bladder to the fundus of the uterus, and fastens the denuded surface of the bladder to the anterior wall of the uterus. Dr. Mackenrodt assured me that the operation had been invariably successful in more than one hundred cases, without mortality and without a single recurrence.

COMPLETE PROCIDENTIA OF THE UTERUS.—The advocates of complete

extirpation of the uterus and appendages, as a sovereign remedy for the various ails of womankind, at once put this condition down as a special indication for vaginal hysterectomy; but it was not so very long before some of these patients returned with prolapse of the vagina, with intestine in the sac, her original complaint being a far better condition than the unfortunate sequelæ. Jacobs has cut the Gordian knot, resected the slack portion of the upper part of the vagina and slack broad ligament, and reunited the stumps of the vagina, broad and round ligaments, in such manner as to make impossible any further prolapse of intestine or vagina. His operation is by far the most effective yet devised, is very simple, and without mortality.

EXTIRPATION OF THE UTERUS FOR CANCER WITHOUT CLAMP OR LIGATION.—The early recurrence of cancer after vaginal extirpation of the uterus has been an argument against undertaking the operation in the more difficult cases. One good reason for such recurrence is the infection of the wound with small particles of cancer, which become grafted, so to speak, and soon produce the original complaint. If the tissues are everywhere severed with the hot iron, the wounded surfaces are seared and all vitality of the adjacent cancer tissue destroyed by it. There is no bleeding from the small bloodvessels, and seldom from the large ones, which can be tied or clamped, as may seem best. The operation does not differ materially from the ordinary hysterectomy, except that the hot iron is substituted for the knife or scissors, and more time is necessary. Dr. Mackenrodt, who devised the operation, is confident that he can show a larger percentage of cases free from recurrence than those operated on by the usual method.

GEORGE R. SOUTHWICK, M.D.

PERIPHERAL NEURITIS FROM TOBACCO.—Dr. J. S. Bury, mentioning the well-known fact that tobacco may give rise to neuritis of the optic nerve, with consequent amblyopia, points out that peripheral nerves may also be affected, though rarely, by this drug. A great smoker of thirty-seven years who had suffered for two months from sensations of cold and formication in his fingers and toes, had noticed for several years a diminution of his visual power. Careful examination revealed a decrease of strength, especially of the left hand, decreased mobility of the fingers, slight atrophy of the interossei as well as of the muscles of the thenar and hypothenar eminences. The sensibility of the hand was diminished, the patellar reflex absent, marked decrease of visual acuity, double and great scotoma (central) for green, and on the left side small central scotoma for red. The optic discs were pale and seemingly atrophic. With stopping the use of tobacco there was rapid amelioration. In two other cases he met with symptoms of peripheral neuritis, yet they were not as marked. —*Anales Del Circulo Medico Argentino*, No. 7, 1897. Prof. Kobert, *Lehrbuch Der Intoxikationen*, p. 620, 1893, cites Walicka (*Vrach*, No. 18, 1887), who had examined one thousand workmen in forty Russian tobacco factories, to the effect that this occupation chiefly causes affections of the nervous system, as mydriasis, palpitation of the heart, tremor, dyspnoea, increase of the reflexes, headache, vertigo, gastralgia and twitching of the extremities. Picric acid gives a characteristic precipitate in the urine of tobacco-users, if nicotine be present.

ASCITES IN YOUNG GIRLS AND WOMEN.—Dr. G. Bouilly, from observation of a number of cases of ascites in girls and young women where operation

was done, concludes that the variety of ascites described by Cruveilhier as an idiopathic variety occurring at puberty must be looked on as tuberculous of the tubes and ovaries, with consequent tuberculous peritonitis. Especially where the disease is limited to the ovaries, tubes and adjacent peritoneum is the ascites the greatest. The exudate may develop slowly and insidiously under the best state of health, without for a time affecting the general health. The majority of the patients are from sixteen to twenty-four years of age, virgins or nulliparæ, who, possibly or not, after a few attacks of pain in one side of the abdomen, notice an increase in its size. The quantity of fluid exuded varies between four and eight quarts—moderate in amount—while gaseous distension of the abdomen may aid to increase its size. The patient is pale, anæmic, with possible swelling of the face, and after a certain time the menses are suppressed.

The abdomen does not present the characteristics of ordinary ascites, for the flanks are not distended, nor the middle zone flattened but globular in the centre, and depressed laterally as with an ovarian cyst. It is easily confounded, diagnostically, with an ovarian cyst. (I know of a case where a distinguished surgeon diagnosed ovarian cyst and met with a peritoneal tuberculous on operating.) Vaginal examination reveals no liquid in the culs de-sac. In short, there are the physical signs of an encapsulated exudate.

Differentially the sense of fluctuation is indefinite and vague, while with an ovarian cyst it is clear and pronounced. The age of the patient, the general symptoms of disturbance, the amenorrhœa, the intercurrent painful crises and occasional attacks of fever which have accompanied or preceded the ascites, are of diagnostic importance. At times one may be able to palpate vaginally indurated tissue, both posteriorly and laterally to the uterus, which signs are of high diagnostic value. Medical treatment with revulsives to the abdomen has cured a few cases; paracentesis has done good in a certain number, for the ascites did not reappear, but as a rule, surgical measures are necessary. There have been cases where the fluid was absorbed spontaneously.—*La Settimana Medica*, No. 24, 1897. Osler, *Practice of Medicine*, p. 238, speaks of the diversity of the symptom-complex of tuberculous of the peritoneum. Ascites is frequent, but the effusion is rarely large. It is sometimes hæmorrhagic. It may simulate the effusion in cirrhosis of the liver, of which disease it is to be noted that tuberculous peritonitis is often a final complication. Fever in many instances is slight, and in most of the cases the temperature is subnormal, and for days it may not rise above 97°, with a morning temperature of 95.5°. An occasional symptom is pigmentation of the skin, which has led to a diagnosis of Addison's disease. Dock has recently called attention to the low specific gravity of the exudate in cancerous peritonitis as distinguished from the effusion in tuberculous peritonitis. I have seen this tested in a case of carcinoma of the stomach with metastasis to the peritoneum where, with a bloody, dark and apparently dense effusion into the abdomen, the sp. gr. was about 1014.

FRANK H. PRITCHARD, M.D.

STROPHANTHUS A CLINICAL STUDY.—In a paper upon the physiological action of strophanthus, Reynold W. Wilcox, M.D., LL.D., makes the following observations: The field of action of strophanthus is especially upon cardiac muscular fibre, and this action is marked. Therefore we should expect an energetic cardiac systole, and, secondarily, a slower pulse-rate. As a consequence of a slower and more perfect systole, an irregularity of rhythm

previously existing becomes lessened. There is but little change in the calibre of the bloodvessels. It possesses a diuretic action under limitations; that is to say, it is diuretic so far as increased blood-tension causes a larger amount of urine to be excreted.

Its therapeutic field of usefulness can be ascertained from the following facts: (1) It acts directly upon cardiac muscle. (2) It has little or no influence upon the calibre of the bloodvessels. (3) It acts but temporarily upon the innervation of the heart. (4) It is diuretic in certain cases, particularly those in which the previously-existing blood-pressure is low. (5) It is a bitter stomachic, and in moderate doses does not disturb digestion, and it relaxes the bowels. (6) It is antipyretic within limited range, because under its administration the consumption of oxygen is smaller, and the processes of combustion are depressed. (7) Since its active principle is soluble in less than its own weight of water, it possesses the diffusibility of a soluble crystalloid, hence the prompt results from its administration; its active principle escapes with the urine, so that we have also ready elimination, although somewhat slower than its absorption, and therefore an overlapping of effect from too-frequently-repeated doses. (8) Habit does not seem to impair the therapeutic usefulness of the drug.

The therapeutic indications are, then: (1) Rapidly-recurring cardiac systoles of lessened force and irregular rhythm. We get, then, first, a more vigorous contraction of the ventricle, with a slowing of the pulse-rate, and consequently a lengthening of the diastole, which is the period of rest for the heart; next comes the disappearance of irregularity of rhythm; and, lastly, from improved intracardiac nutrition, a permanent strengthening of the heart muscle. (2) The absence of vasomotor effects enables us to use this remedy in those instances of permanent high tension which are met with in some forms of Bright's disease, in arterio-sclerosis, and in the rigid arteries of the aged. (3) Whenever diuresis can be promoted by increased blood-tension, resulting from more vigorous cardiac contractions, this may be expected from the use of this remedy. (4) The rapidly-appearing effects of its administration, together with its regular elimination, make it the drug of choice when the symptoms are urgent. (5) The absence of digestive disturbances from therapeutic doses and slight likelihood of habituation to its administration make it important when long-continued use is necessary.

The instances in which failure will follow its administration are those of (1) advanced degeneration of the myocardium; (2) extreme mechanical obstruction to the circulation from valvular incompetency or obstruction; and (3) a combination of these.

We may say that success in the administration of *strophanthus* requires: 1. An active, well-made preparation from a reliable source. 2. Avoidance of its use in fully- or over-compensated hearts, in those which present advanced muscular degeneration or mechanical defects of high degree. 3. The use of not too large, or too-frequently-repeated, doses. Five drops of a reliable tincture of *strophanthus*, or one three hundred and fiftieth to one two hundredth of a grain of *strophanthus*, three or possibly four times daily, are sufficient.

The advantages which *strophanthus*, in proper proportions, possesses over *digitalis* may be summed up as (1) greater rapidity, modifying pulse-rate within an hour; (2) absence of vaso-constrictor effects; (3) greater diuretic

power; (4) no disturbance of digestion; (5) absence of cumulation; (6) greater value in children; and (7) greater safety in the aged.

Strophanthus is the drug of choice in:

1. All cases in which we wish to establish compensation.
2. All cases of arterial degeneration in which a remedy which causes more energetic cardiac contractions is required.
3. All cases of cardiac disease where diuresis is necessary.
4. All cases of weak or irritable hearts.
5. All cases of cardiac disease in childhood or old age.—*The Post-Graduate*.

F. MORTIMER LAWRENCE, M.D.

MALFORMATION OF THE RECTUM.—Kirby (*Archives of Pediatrics*) offers the following suggestions as to the general treatment of these cases:

1. An operation should always be performed, and performed without delay.
2. If there be any chance of establishing an opening at the normal site of the anus, the surgeon should at first direct his attention to this procedure.
3. The use of a trocar as an aid in finding the rectal pouch before or after an incision through the perinæum is not sanctioned by modern surgical authority.
4. The results of attempts to establish an outlet for an imperforate rectum through the perinæum are not favorable as regards the production of a useful anus. In case of failure to establish a new anus in the anal region, colotomy should at once be performed.
5. In the formation of an artificial anus the left groin is the best site for the operation.
6. Attempts at establishing an anus in the anal region after a colotomy are attended with great danger, and are generally unsuccessful.

NEVUS OF THE FACE.—Abbe (*Medical News*) says that the best treatment consists in the use of an ordinary large cambric needle or hat-pin, heated to a red heat, and then plunged into the tissues of the nevus *at a black heat*. The insertion of the needle at a black heat has much to do with securing good results. Punctures should be made in this way all over the tumor. There is no bleeding whatever, and the case is usually cured in three or four operations.

HERBERT L. NORTROP, M.D.

OLD CICATRICES, AS A RESULT OF LACERATIONS AND RUPTURES OF THE BODY AND FUNDUS UTERI, A CAUSE OF DISEASE NOT HITHERTO DESCRIBED.—An article by Dr. J. M. Lee, Rochester, N. Y., under the above title, was read before the American Institute of Homœopathy in June, 1897. The doctor says:

"From early recorded obstetric practice complete rupture of the uterus has been understood, and for many years skilfully treated. Can as much be said of those old cicatrices as a result of lacerations and ruptures of the body and fundus uteri which were either incomplete or insufficient for the passage of the child into the cavity of the abdomen? The obstetricians answer: 'We think not. We have seen none of these cases, neither have we read of them.' This is probably true, for when the laceration does not transmit the child into the abdomen, you do not discover it; and, so far as literature is concerned, the condition, to my knowledge, has not hitherto been described. Nevertheless we have met with three cases, in connection with our hysterectomy work, in which the women were total wrecks from neurasthenia, di-

rectly traceable to irritation from cicatrices of the above lacerations. The symptomatology is not markedly dissimilar from that of laceration of the cervix, except that it is much more severe. The diagnosis cannot often be made before the operation of hysterectomy, yet the interior of the womb may be contracted from the cicatrization of from two to four rents, which give the cavity a roughened and narrow feel, as determined by the uterine sound. While in one patient the cicatrices are readily broken through by moderate use of the dilator, and even the pelvic cavity opened, in another the scar tissue may resist safe pressure on the instrument. The indications for treatment can only be successfully met by hysterectomy. In one of the cases, as a result of the tears, inflammatory deposit had formed in front of the uterus, and aided us to decide in favor of the operation. We were not certain, however, in two of the cases, that hysterectomy was the best plan of treatment until the dilator was introduced and usual pressure on the handles caused the blades to rupture through the scar tissue, so that the sound readily passed into the abdominal cavity. It is our experience that when this accident occurs, malignant disease of old cicatrices exist which demand hysterectomy. At any rate, this has happened five times in my practice, and the specimens proved that removal of the uterus was demanded in two cases by the condition under discussion, and in three for cancer of the body and upper portion of the cervix. One of the patients was twenty-one when married, and is now but thirty-nine years of age. During her married life she had eight confinements, all of which were normal except the sixth and eighth. These were difficult forceps deliveries, for which it took, in the former four, and in the latter eight, weeks to convalesce.

"The fact that her recoveries from the sixth and eighth accouchements were both abnormal, that forceps were used in both, and that she was slow in her convalescence, would indicate that most of her injuries occurred at these confinements. When she came under treatment she had a very sallow complexion, was peevish, and everything disturbed her; she was restless and slept but little; had marked pains about the uterus, expressed as chiefly in the sides and back of the head and neck; could not think, and felt as though she would lose her mind.

"In the other one I was unable to find sufficient cause for her profound invalidism. Yet her symptoms were clearly referable to the pelvic organs, and, when the dilator broke through the cicatrices and opened the pelvic cavity, hysterectomy became necessary.

"Another case in which we had similar experience had been admitted to one of our hospitals, and treatment afforded no benefit. She somehow found her way to us, and her case seemed to be one in which the cause of her suffering was centered in the pelvic organs; yet careful examinations were not adequate for the discovery of the lesion. From the examination, we felt hysterectomy scarcely justifiable. Her physician believed that the cause of her trouble was centered in the uterus, and strongly urged its removal. We finally consented to follow his advice, and there were to be found old cicatrices in the body of the uterus. She began to recover from the date of the operation, before the sixth week was able to walk about the wards with the aid of the nurse, which she had not been able to do for years, and within a year had regained her old-time flesh and strength."—*N. A. Journal of Homœopathy.*

W. D. CARTER, M.D.

MONTHLY RETROSPECT

OF HOMŒOPATHIC MATERIA MEDICA AND
THERAPEUTICS.

THE THERAPEUTICS OF THE SPIDER-POISONS.—Cowporthwaite, of Chicago, believes that no class of remedies is more thorough or certain in action than the animal-poisons. Most profound in their effects are the snake-poisons, whose usefulness in low forms of disease is well known. A class of which the general practitioner knows little, however, is that made up of the articulata arachnida, or spider-poisons. While not as wide-reaching in effect or therapeutic efficiency, they cover important conditions for which they should be oftener prescribed.

In order to obtain the desired effects from these remedies they must be thoroughly indicated. In a general way it may be said that the spider-poisons act as do all the animal-poisons; that is, they act suddenly, act destructively, and are apt to be indicated in destructive diseases. As a rule, the animal-poisons decompose the blood and render it blackish and fluid in its character. This is, in great measure, true of the spider-poisons, but, at the same time, we obtain local symptoms not produced by the other poisons, such as rapid swelling, streaks of inflammation in the course of the lymphatics, coldness, anxiety, and scarcely perceptible pulse. These are not, however, the distinguishing effects of these poisons; these may be found in the nervous system, the motor nerves in particular being intensely affected. All spider-poisons produce chorea, and for that reason are strongly indicated in that disease.

Mygale lasidora, the large black Cuban spider, has been found an excellent remedy in chorea of purely nervous origin without organic disease. The symptoms indicating the drug are constant nervous twitching of the eyelids; restless hands; cannot sleep, because he cannot keep the limbs quiet; ridiculous dreams; muscles of the face twitch; puts the tongue out with difficulty, because it jerks so; convulsive movements of the abdomen; hands in constant motion; unsteady gait; limbs in motion when sitting, and drag while walking; cannot put the hand to the face, because it is suddenly drawn back; aversion to food, because so nervous; nausea, with dim sight; weakness; palpitation; sensations of constriction in the throat; pain in the head in the morning, worse in the eyes and from temple to temple; repeated nervous chills, followed by fever, with trembling of the whole body; excessive thirst; flushed face; rapid pulse; tongue dry and brown; despondency and fear of death. It is not to be supposed that all these symptoms must be found in every case in which this drug will prove of benefit. The fact that the chorea is of nervous origin, that the patient has no organic disease, and that there is a great and constant nervous twitching, with restlessness, etc., is sufficient to indicate the drug.

Aranea dialema, the Cross spider, was selected by Grauvogel as typical of what he called the "hydrogenoid constitution," when there is too much water in the system and the patient cannot tolerate moisture. It is characteristically worse in damp, wet places, or in wet weather. Such conditions are eminently favorable to malarial poisoning. The patient feels cold to the very bones, there are bone-pains of a boring, digging character, but no fever. The symptoms return at exactly the same hour, recalling cedron. It has proven especially useful in intermittent fevers which have been checked by quinine. It is indicated when there are hæmorrhages or enlargement of the spleen. It is valuable in neuralgias and other conditions aggravated by dampness.

The *tarantula* is strikingly similar in its action to the serpent-poisons upon both blood and nervous system. Its sphere of usefulness is in the treatment of hysteria. Farrington claims that it is to be thought of only in those cases where the deceptive symptoms are present; the patient tries in every way to deceive those about her; pretends to be very sick, and has a mental aberration which is assumed. It is also indicated, particularly in hysteria, when there are organic changes in uterus and ovaries. Tarantula poisoning causes burning and swelling of the glands; the poison, no matter what the seat of the bite, is conveyed to the cellular tissue about the neck, and there at once occurs immense swelling of a dark-red or purplish hue; choking seems imminent, and, at the same time, a nose-bleed of dark clots comes on, and generally relieves the choking. Cerebral congestion is shown by throbbing carotids; there is pale, earthy face, the fauces appear swollen and purplish, and there is more or less difficulty in swallowing. In paralytic conditions these symptoms might indicate lachesis rather than tarantula, were the characteristic nervous phenomena not present. The patient is nervous and restless, requiring frequent changes of position; he must constantly busy himself or walk; and here, according to Hering, is the key-note for this drug.

Theridion, the "orange-tree spider," deserves passing notice because it is frequently used in the treatment of hysteria and semi-hysterical states. The brain is in a state of excitement, the patient is talkative and inclined to hilarity, there is nervous weakness and the limbs tremble, and over-exertion causes fainting. There is a dull, heavy headache; the head feels too thick, sometimes; there is more or less throbbing over the left eye, and nausea; worse from lying down or from anyone walking over the floor. Every sound affects the whole body, especially the teeth, and there is sensitiveness to light, with vertigo and nausea, worse on closing the eyes, from fast riding, or from the motion of a ship. The headache is similar, in some respects, to that of belladonna, sanguinaria, and spigelia, but only theridion has the extreme nervous weakness and trembling. It has been successfully used in the treatment of subacute catarrhal conditions, with thick, yellow, offensive discharges. The poison also influences deep-seated dyscrasiæ, it even being claimed that theridion has the power to stay and even cure phthisis florida in its incipency; but this the author wisely doubts.—*Medical Era*, October, 1897.

THE TREATMENT OF ACUTE ENTERO-COLITIS.—Calvert, of Denver, states that were he confined to one single remedy for all gastro-enteric diseases, that remedy would be water. In all forms of these conditions, especially when the discharges are of a watery nature, supplying the deficiency will do much to allay the irritation. Washing out the colon and leaving a small quantity of

clean, warm water, containing a trifle of chloride of sodium, will work wonders.

Carbo veg. is to be thought of when there is much gas or tympanites. Camphor and veratrum alb. in the forms where pain is severe, with watery discharges and collapse. The green, choppy stools call for chamomilla. Colic, with red face, chamomilla; with pale face, belladonna. From cool weather, dulcamara or antim. crud. Arsenicum in collapse, podophyllum when the discharge is yellow and of pea-soup consistency.—*Denver Journal of Homœopathy*, September 15, 1897.

SCOPOLAMINE POISONING.—Swan, of Chicago, relates two cases of poisoning which show its close relation to belladonna and hyoseyamus. For a year he had used it as a substitute for the other mydriatics. Recently he purchased a fresh bottle and instilled some drops of a 1.5 per cent. solution in the eyes of two little girls, each about ten years of age, and not related. In one case it was instilled twice, with an interval of ten minutes; in the second case it was instilled but once. Each was about equally affected. The drug produced symptoms similar to hyoseyamine and atropine poisoning. In fifteen minutes the faces became flushed, and in the case of the one who had had the drug twice applied, the lips, cheeks and chin became mildly cyanotic. The children lost control of their limbs, could not stand alone, the pupils became widely dilated, the lips dry and cracked, the pulse 150, acute mania set in, with hallucinations of all sorts of birds, insects and animals flying in the air and creeping over the bed where they lay. They were at the same time jumping, laughing, crying and uttering inarticulate sounds, with here and there a word which informed the visitor of their hallucinations. The acme of the intoxication was reached in two and a half hours, when the flushing and cyanosis decreased and they began to regain control of their limbs. The excitement and hallucinations continued during the entire night, and in the case of the one in whom the drug had been twice used until 4 o'clock the next afternoon. Copious rectal injections of strong coffee were given and hypodermic injections of pilocarpine.—*Hom. Eye, Ear and Throat Journal*, October, 1897.

THE TREATMENT OF CAPILLARY BRONCHITIS.—Sherman, of South Boston, believes that the idea of reducing the temperature in capillary bronchitis and catarrhal pneumonia with cold water is a good one. Some prefer the tepid wet pack, and good results are produced by it; fluxion to the skin follows, perspiration and evaporation are promoted, and the fever lessened. This serves very well for the milder cases, but when there is extreme dyspnoea, accompanied with considerable cyanosis, a bath of 79° to 84°, continued for twenty minutes, followed by cold affusions with from ten to twenty quarts of water, the colder the better, the child in a standing posture and to be rubbed vigorously by two attendants during the affusions, will often turn the scale between life and death. As a result of the cold affusion, involuntary, deep, forcible respiration ensues, the air is driven through the lungs with greatly-increased force, and those parts which may have become atelectatic are inflated again and recovery made possible. The stimulating effect on the respiratory centres is followed by immediate improvement in the circulation.

The medical treatment, while secondary in importance, is not to be neglected. Aconite is always to be thought of at the outset, and continued as

long as the temperature and pulse show a high grade of fever. Bryonia is another remedy indicated by hard, dry cough, causing the child pain and showing that there is a probable pleuritic complication. But antimonium tartaricum is the remedy on which the writer places the most reliance in the catarrhal diseases of children. He gives it in the second and third triturations. It is indicated by an abundance of moist râles.

There is a condition sometimes in capillary bronchitis where they become so filled with tenacious mucus that suffocation seems inevitable. In such a case it is advisable to give apomorphia, one thirty-sixth of a grain, hypodermatically; this produces explosive vomiting, thus dislodging the viscid secretion and relieving the patient.

Another important therapeutic agent is cool, moist air. A temperature of 55° to 65° is recommended. Cold air causes the child to cough, and the cough is essential in preventing pulmonary collapse. The moist air is very soothing to the lungs, which have been throwing off a greatly-increased amount of moisture through rapid respiration. It also serves to dissolve the tenacious mucus and facilitates respiration. An improvised means for securing the moisture consists of a boiler heated on a stove in an adjoining room, with an attached rubber-tube to conduct the steam to the sick-room. An improvised tent of blankets enclosing a pan of hot water may answer.

The diet must be highly nutritious. Milk, malted milk, Mellin's food, bovine, liquid peptonoids, and scraped raw beef salted and spread upon bread, are chiefly recommended.—*N. E. Medical Gazette*, October, 1897.

THE ACTION OF THE SNAKE VENOMS.—Price, of Baltimore, has made a careful study of the venoms of lachesis trigonocephalis, crotalus, elaps coralinus and naja tripudians. Of these four snakes he finds that naja and lachesis contain, probably, an excess of peptone in the venom, and crotalus and elaps contain an excess of globulin in their venom, the two genera thus becoming crossed, as it were, in the matter of venoms. To give a *résumé* of the general effects of these four serpent-poisons, by which they may be therapeutically differentiated, it can be said that *naja* may be selected in conditions involving the nervous system, which is shown in cardiac symptoms, cardiac pain, palpitation, dyspnœa, etc., together with such conditions as those which show putrefactive tendency, with dark liquid hæmorrhage.

Lachesis is useful in conditions involving the nervous system also, acting especially on the left side of the body, producing, additionally, a sensitiveness of the affected surface, interfering with the heart's action, causing a band-like sense of constriction. Hæmorrhage does not very frequently call for the administration of lachesis, but when indicated the blood should be dark and resemble charred straw, because of the imperfect coagulation of the fibrin.

Crotalus, while it acts upon the nervous system and the heart, is rather more helpful in local conditions, gangrenous conditions due to degenerative changes in the capillary walls, with hæmorrhages from the orifices of the body, or from the stomach, the blood being uncoagulated.

Elaps has an affinity for the right side of the body, in contradistinction to the left-sided action of lachesis, and also produces the darkest hæmorrhage of the quartet, the blood generally being liquid, but sometimes clotted. Of all *naja* causes death soonest.—*N. A. Journal of Homœopathy*, October, 1897.

F. MORTIMER LAWRENCE, M.D.

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SENILITY, WITH ESPECIAL REFERENCE TO THE CHANGES DEVELOPING
IN THE CIRCULATORY ORGANS, THEIR EXCITING CAUSES AND
SYMPTOMS.

BY W. C. GOODNO, M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania, Scranton, 1897.)

THE observation of an English pathologist that "a man is as old as his arteries," or words to this effect, expresses a relationship of the vascular system to the general progressive degeneration accompanying advanced life which is becoming better appreciated from day to day by the thoughtful investigator. This important truth has evolved from the researches of the pathological anatomists of the past few decades who, with the scalpel, microscope and reagents, have been penetrating into the obscure mysteries of disease with such astonishing success. They, with the help of their physiological brethren, have demonstrated the close relationship of the vascular tissue, in its nutritive state, to the integrity of the circulating fluid, and the marked influence of artero-capillary degeneration upon the nutrition of the tissues and organs. How such an intimate relationship as exists between such a variety of affections and changes in the vascular structures could have remained unsuspected and undetected for so long a period of time is, from the

standpoint of present knowledge, a subject for surprise; and, further, that even at the present day a knowledge of vascular pathology and of the widespread influence of vascular degeneration should be a subject of interest to so few.

Old age, which most of us look forward to with dread, is most intimately associated with progressive degenerative changes in the heart and vascular system. We are unable, as yet, to state that this condition is the primary feature of senility, as we do not yet possess full information as to the changes which continued life is developing in the blood and blood-forming organs. The body processes are so dependent upon each other, and we still are in need of so much information concerning many of them, that we cannot yet, and perchance never will be able to single out impairment of a single function as the primary departure from the normal standard, and as initiating the succession of changes terminating in senile death. It will prove a consoling thought to some that we have high authority for the belief that all, however advanced in life, die from the ravages of disease, and not from degeneration dependent upon mere duration of life. Observers of this class do not recognize in senile decay the cause of life's termination, but rather a predisposing factor giving to the workings of disease an easier task. While it appears true that but few persons succumb purely to the life-limit apparently set for us, yet we are constrained to exclaim, in the language of the inspired poet: "The days of our years are threescore and ten; and if, by reason of strength, they be fourscore years, yet is their strength labor and sorrow, for it is soon cut off, and we fly away." Nothing is to me more certain than that from the acme of life until its close—aye, from the cradle to the grave—degeneration progresses hand in hand with anatomical and physiological development, and necessarily terminates in decay and death.

In early life the tissues are veritably gorged with nutritive fluid, favoring rapid nutritive changes and growth. This is the result of the relatively low blood-pressure and high degree of activity of the heart (rapid pulse-rate), favored by arterial trunks which are large in proportion to the size of the heart and the length of the body. The blood-circuit is accomplished in about one-half the time required for the adult. With con-

tinued growth and the development of adult life the relationship between the heart and bloodvessels undergoes a change. The arteries become relatively smaller, the heart larger and stronger, with the necessary result of a higher blood-pressure and slower pulse-rate. Through the period of early adult life little change occurs, and man is at his best in his capacity for mental and physical effort; but with what we term "middle life" there appears the first evidence of change in the structure of the cardio-vascular walls, which slowly diminish in elasticity, ultimately becoming more or less rigid tubes. The capillaries also share in the process leading to obstruction of their lumen and reduction of their number, with a corresponding impairment of tissue-nutrition. The altered arterial trunks, dilating before the waves of imprisoned blood, return less and less perfectly to their normal size, with the result of permanent dilatation. The changes developing in the arterial system with the progress of age, in part, at least, form no exception to those occurring in the general tissues. These, from the earliest to the latest period of life, undergo a continuously increasing condensation, resulting, in advanced age, in the dense and fragile bones, the stiffened and feebly-acting muscles, and the shrivelled, loose and dry skin. The impaired glandular structures secrete imperfectly, the blood is diminished in quantity and deteriorates, and all functions are feebly and more feebly performed, until at last man, worn out by living, sinks to rest.

It must be evident to every student of the subject that our development is indissolubly linked with degeneration, and that decay is man's final and necessary estate; that degeneration is the ultimate of development. Many views have been held concerning the cause of what we may term the normal progressive degeneration incident to advanced life. Prominent among these are loss of vital force, impaired blood, disorder of various organs, etc. As to its dependence upon a loss of vital force, we may comment, that it is a wise provision of nature that we are endowed with potentialities, not a given store of power which is expended to a finish, and that progressive investigation is confirming the doctrine that senile degeneration is not due to failure in the sources of potential energy, but to alterations in the tissues rendering them incapable of appropriating the materials offered them.

It is a fact of especial practical importance that the tissue-changes peculiar to senility may be, indeed often are, developed prematurely, presenting a condition for treatment. Man's development being a physiological process, it is more nearly related to normal tissue-changes than to periods of time, consequently terminal changes are not due at a sharply-defined age. The heart, like the brain, is better preserved from decay than the general tissues, which explains the remarkable preservation of the functional activity of these organs in advanced life. The heart does not share in the general atrophy of the tissues incident to old age, but hypertrophies, enabling it to overcome the increased resistance age develops in the blood circuit. The influence of the obstruction is thus in great measure overcome. Not only is this true, but a heart which has been impaired in strength may, in consequence of this hypertrophy, greatly improve.

Senile cardio-vascular degeneration increases very slowly, and usually without attracting the attention of its possessor until the heart is called upon for an unusual exertion. It proves unable to meet the demand, the myocardium yields to the increased intra-cardiac pressure, and dilatation, the greatest enemy of the senile heart, is developed. This demand upon the heart may develop very gradually, as from increasing arterio-sclerosis, although we must not overlook the fact that this lesion may progress with relatively great rapidity, even in early middle life, leading to permanent reduction in the capillary area. In considering the influence of the heart and arteries in the production of circulatory obstruction, and the resulting weakened heart, we must not overlook some accessory conditions, notably certain blood changes, especially plethora and hydræmia; reflex vascular contraction; and, very important, the condition of the tissue canals as to their degree of distention—a factor long since recognized by Donders, but of which little notice appears to have been taken.

The greatest danger to the subject of senile degeneration is loss in the heart's power, which sooner or later must result. A consideration of the causes which accelerate this inevitable result may be of profit. Failure of the degenerate myocardium with development of symptoms attracting attention to the heart not infrequently follows upon unusual or severe physical exer-

tion. This may be in the nature of violent exercise demanded by some serious emergency, as an accident, or, often, to the doing of some work the individual is not accustomed to, involving considerable and unusual effort. I have had regularly under my care for several years a number of persons whose degenerate condition was, in consequence, known to me, who have developed the first symptoms attracting attention to their hearts during or soon after running for a train, walking against a severe storm of snow and wind, indulging in unusual athletic exercises with injudicious violence, etc. Allow me to illustrate. A clergyman of sedentary habits who had rigid arteries, slight enlargement of the heart, and the various evidences of arteriosclerosis, but who had been in general good health, barring an old dyspepsia, being something of a "Jack-at-all-trades," assisted somewhat in the building of his new house. It proved the undoing of his heart, for enfeeblement of the ventricular systole, with marked arrhythmia, was the result. He died soon after the primary chill of a pneumonia, some eighteen months later.

A manufacturer, a large, well-developed man, who considered himself strong and well, but who was a dyspeptic and lithæmic, with evidences of arterial degeneration and rather feeble heart, was forced to walk two miles against a severe storm of wind and snow. It was followed at once by dyspnœa, and feeble and irregular pulse. His condition has much improved after about one year of rigid treatment.

I have seen a sudden development of symptoms of cardiac failure in the senile without an apparent cause. A lady of 59, who has been a patient of mine for several years, complaining of gouty symptoms (she belongs to a highly gouty family), without the slightest traceable cause suddenly developed feebleness, intermittence, and irregularity of the heart's action, with oppression of breathing and an ever-present consciousness of a heart. She is at present under treatment, with as yet little improvement.

I have not met cases of heart failure from excessive emotion, although there can be no doubt but that it sometimes occurs. It seems to be a generally accepted fact that excess of emotion of any sort, but especially that arising from joy, exercises a high degree of influence over the cardiac function, even to the production of sudden death.

Excessive "wear and tear," so common in our rushing age, and the ever-present annoyance of an unsuccessful life, through inhibition of the heart and disturbance of nutrition, contribute daily toward the shortening of life. Sexual and dietetic excesses favor the same result. The latter provokes dyspepsia, disorder of the hepatic function, lithæmia, plethora and gout. The latter, and syphilis and alcohol, are especially influential in the production of vascular degeneration.

Acute and chronic-disease processes operate in various ways to break down the degenerate heart. All, more or less, still further weaken the impaired heart through exhaustion of nerve power and impairment of nutrition. Reflex inhibition of the heart with intermission and arrhythmia is sometimes observed in the old, apparently independent of lesions in the heart, and is apt to be associated with disorders of the digestive apparatus. If the intermissions are frequent or persistent the symptoms assume importance, for they lead to loss of heart power, and we can never be certain that the heart and arteries are really free from some degree of degeneration. One is sometimes surprised by the post-mortem evidences of vascular degeneration which had not been suspected during life. This reflex disturbance is much more common in the young. During the past year I have seen two very interesting cases of this character, both with Dr. C. R. Norton, of Philadelphia. Both were young ladies, one eighteen, the other twenty-two years of age. One was a hard student, and the trouble developed soon after leaving college. The other was still at school. In neither was it certain from what organ the reflex came, but there was not the slightest evidence of organic disease of the heart to account for the symptoms. Both have slowly improved.

With these general prefatory remarks, relating in the main to the causation of degeneration as met in the heart and arteries of the old, I will call your attention for a short time to some of the symptoms. Under neither heading have I attempted completeness, but to do no more than call attention to some things that have interested me.

If asked, "What symptom most frequently calls attention to a senile heart?" I should reply, "disordered action." At least this is the symptom which attracts the patient's attention most frequently, and leads him to seek advice. It takes the

form of arrhythmia, in some form, or intermittence. The patient may not have discovered this disorder, only a "continual sense of a heart." Such persons often come with the statement, "There must be something wrong with my heart," or, "My heart is excited, of late." Most intelligent persons, however, detect irregularity or intermission if they exist.

We must not be in a hurry to pronounce a heart degenerate even if intermission is a long-continued symptom. I had under my care for twenty years, at intervals, an easy-going manufacturer whose pulse, to my certain knowledge, was intermittent for that length of time, and he assured me that he had himself discovered it some years previous to my first knowledge of him. He recently died at seventy-one years of age, from Bright's disease of the sclerotic variety. His heart presented some hypertrophy, especially of the left ventricle, and the arterial tension was increased; but the arteries were not markedly rigid or tortuous, and these changes developed during the last years of his life in connection with his Bright's disease. During all the years of intermittence his health had been exceedingly good, he never having had treatment except for slight transient ailments. It is rather remarkable that the long-continued intermittency in his heart's action had not resulted in dilatation years before the cardiac changes incident to age and his renal disease developed. Another gentleman, sixty-two years of age, recently seen by me for sudden cardiac break-down, who at the time of its occurrence was in full, active business, rode a bicycle, and, indeed, considered himself quite an athlete for a man of his years, illustrates the fact that considerable degeneration is not incompatible with activity and all the outward evidences of good health. He had long been a subject of uricacidemia, had some hypertrophy of the heart, arterial rigidity, and excessive urination. His physician, Dr. W. C. Powell, had repeatedly warned him to desist from his violent exercises, but without result. While pushing his wheel over the hills of his neighborhood, recently, he became giddy, had momentary loss of consciousness, and fell to the ground. The heart has been exceedingly feeble since this attack, is arrhythmic, and intermits. There is also a very slight degree of left hemiplegia, vomiting, without loss of appetite, occurring easily after any exertion, and in the early morning. The urine has become

scanty, slightly albuminous, and contains a few hyaline casts. We have in this case an arterial system degenerating from long-continued uric-acid poisoning, but keeping up a satisfactory circulation until the hypertrophied and dilating heart was further dilated by injudicious exertion, when the heart broke down and a small extravasation took place within the cranium.

Aside from its significance as a symptom, intermission of the heart, if long continued, almost certainly leads to dilatation, and is therefore to be invariably considered seriously. It lessens the heart's efficiency, but not its work, which is increased in consequence. The serious outlook, other things being equal, is in direct ratio to the frequency of the intermissions. The heart must possess considerable reserve power to negative the influence of frequently-repeated intermissions (a case of this character I have already reported); and, *per contra*, infrequent intermissions produce a marked dilating influence upon hearts already highly degenerate, or upon simply weak hearts, if the feebleness is of high degree. To the senile heart especially it adds an element of danger acting along the same line as the other important factors, viz., increased tension in the systemic circulation, impaired expulsive power of the ventricles due to the weakening of their walls; and, often, inhibition of the heart, which may have various sources of origin, and very considerably decrease the output of the heart with each systole of the ventricles.

Disturbance of the orderly succession of ventricular contractions—of the heart's rhythm—arrhythmia—is an exceedingly common attendant upon senile changes in the arterial system. The state of the blood exercises an influence in the production of arrhythmic disorder of the heart, often felt by the degenerate heart. Anæmia in its various forms, particularly hydræmia, is most important. Persons, subjects of this condition, who appear to be free from heart disease, easily develop intermittence from over-exertion, and this may be associated with disturbed rhythm. The ease with which intermittence or rhythmic disorder is developed is of value in forming prognostic conclusions, suggesting much regarding the state of the heart-muscle and blood.

The force of the heart's contractions may vary, which condition is often associated with arrhythmia. The full beats, which

are readily recognized, especially in the sphygmographic tracing of the pulse, are the product of coincidence of the auricular and ventricular systoles.

Palpitation, slowing of the heart-rate (bradycardia), and paroxysmal hurry of the heart (tachycardia), are occasionally met as symptomatic features of the senile circulation, but, like the symptoms already considered, are not peculiar to the latter portion of life. These, with tremor cordis, and delirium cordis, require some comment.

I do not observe palpitation in association with senility very frequently; it is more common in the young. A year since I saw a senile carpenter who suffered much from palpitation, also from tachycardial attacks. The left ventricle was dilating, a systolic murmur finally appeared, and he died from asthenia. He was anæmic and dyspeptic, but had never suffered from palpitation prior to his senility.

In reference to slow heart there is more to say. It is, perhaps, most important to keep in mind that slow pulse does not always indicate slow heart. This error is avoided by counting the heart's pulsations at its apex as well as estimating them by the pulse. In simulated or false bradycardia a certain number of the blood-waves do not reach the wrist. Some experiences of my own corroborate a statement I have somewhere read, viz., that in elderly people a development of true bradycardia, especially if associated with any evidences of cardio-vascular degeneration, suggests beginning failure of the heart's power—anatomically, as we shall see, beginning dilatation of the left ventricle. The development of bradycardia in the senile is, therefore, to be looked upon with apprehension. Apoplectic-form symptoms sometimes develop in connection with slow heart, and I have met cases in which their origin in a weak heart was not suspected. The result is disastrous to the patient. This group of symptoms must also be discriminated from epilepsy, which is frequently met in bradycardiac patients. Corvisart, physician to Napoleon I., relates that his distinguished patient's heart never beat faster than 40 per minute, and that he was epileptic.

Unlike palpitation, slow heart is very unusual in early life. The old idea that bradycardia is an indication of fatty heart seems to have been disproved. Although it may attend upon

that condition, it must be due to other causes. Bradycardiac hearts, when the condition is well established, are almost invariably dilated, especially the left ventricle. The distinctive physical signs of this condition are present, and an endocardial murmur, usually systolic, may be heard most distinctly near the apex, but also very generally over the heart's region. Until late in the course of the case the heart does not give an impression of weakness. Arrhythmia is seldom associated with bradycardia.

Although not immediately related to the senile circulation, I ought, perhaps, in this connection, to mention the remarkable influence of injury to the cervical spine in the production of slow pulse. Surgeons have often observed it, and unanimously agree that the cervical spine as low as the sixth vertebra is the portion related to this phenomenon. It is highly probable that it is due to injury to the spinal accessory nerve, the lowest fibres entering into this nerve springing from the level of the sixth vertebra. It will be remembered that this nerve passes upward through the foramen magnum into the cranial cavity, where its internal portion unites with the vagus, becoming, in all probability, the motor nerve of the heart. There are many cases on record showing that injuries to the roots or trunk of the spinal accessory nerve, whether in the nature of traumatism and its consequences or of inflammation, result in slowing of the pulse to 40 or 30, and even 10 or less, in rare instances, and that such retardation may continue in some cases for years.

Tachycardia—paroxysmal heart-hurry—is much more frequently met as a symptom of senile degeneration of the circulatory organs than the slow heart. Tachycardia is used by some authors in a generic sense, covering all forms of rapid heart, even that of the new-born. It is more appropriate, however, to restrict its use to paroxysmal attacks of abnormal rapidity of the heart's action. It is a symptom which is not peculiar to the aged nor to those persons presenting evidences of senile degeneration, but it often attends this condition, and is invariably pathological in character, indicating some physical condition interfering with the circulation, or a disorder of the controlling nervous system. The idea of an essential tachycardia, which still prevails to some extent, does not seem to have proper clinical support. Because it has been the only

symptom noted by certain observers in a few cases does not present sufficient reason for the recognition of an "essential" form of tachycardia. In all the cases I have seen—and this experience agrees with that of many clinicians—there has been evidence of some organic change in the heart or arteries, or a history of the previous operation of a cause of disease of the circulatory organs. Many cases have developed upon strain of the heart, especially after injudicious exercise by a middle-aged, sedentary individual. That it often develops in connection with cardio-vascular degeneration is undoubted. The existence of tachycardia calls for watchfulness, as in most cases evidences of a cardiac lesion appear within a year or two of its development. In a large percentage of the cases it is a symptom developing upon endocardial inflammation. I have collected reports of many of these cases supporting this statement. Mitral stenosis is the most frequent sequential lesion. In the older persons aortic degeneration occurs frequently. It is wiser, therefore, to consider tachycardia as invariably symptomatic, and continue to search for the exciting lesion while using measures prophylactic of cardiac inflammation. Its occasional attendance upon the early stage of development of senile vascular changes before these are readily discoverable is the practical point I especially desire to make. There is no especial comment to be made upon tachycardia as a symptom of well-developed senility except that it more frequently appears in connection with dilatation of the left ventricle and atheroma of the larger vessels. In any case one must inquire as to chronic alcoholism, which gives rise to some of the most typical cases; but even in these cases post-mortem examination gives evidence of change in the myocardium, often of neuritic changes in the vagus, or both combined, thus giving an anatomical basis for the symptom. Tobacco is also accountable for some, as well as certain drugs, including tea and coffee. Drug cases I have met repeatedly in the young. A reflex tachycardia, of which there are many cases originating in many of the organs, is not rare, and is unattended by danger except in highly degenerate persons. Growths, and lesions of various sorts involving the pneumogastric, whose inhibitory influence is the immediate cause of the tachycardiac condition, may cause this symptom, but their consideration is hardly in place at this time.

That tremulous fluttering of the heart which comes on with such suddenness, and ends equally suddenly in a forcible contraction of the ventricles, and which is ordinarily termed *tremor cordis*, is a not infrequent symptom of the degenerate heart. Like the other symptoms considered, however, it is not peculiar to the senile, nor, indeed, is it an evidence of any form of organic disease involving the circulatory system, yet it is certainly much more common after the age for senile degeneration has been reached. In *tremor cordis* there is an entire absence of the throbbing which marks palpitation. It is a peculiar tremulous sensation, attended by anxiety. Perhaps the usual very sudden development of this symptom has much to do with the production of the fearful feeling attending. The appearance of an attack of *tremor cordis* is, so to speak, with a bound and without the slightest premonition. The pulse is thready, and imparts a tremulous or trembling sensation to the finger. The duration of attacks varies from a mere development of the symptom, occupying a few seconds, up to five or six seconds—seldom more. They may be frequently repeated. A number of cases have been reported indicating that the patient was able to control the attacks in a measure by voluntary impulse. This is interesting and corroborated by what is accepted as a fact, *i.e.*, that some persons have been able to arrest the heart's action by voluntary impulse. Many will recall interesting accounts of the exercise of this power by the East Indian fakirs, also several celebrated cases reported by physicians of eminence.

To explain *tremor cordis* as it appears in connection with senility, or at any period of life, is not yet possible. It seems to be a reflex inhibition through the vagus nerve, the uncontrolled heart suddenly going off into rapid, incomplete systoles, the left ventricle becoming fuller and the arteries emptier. This continues until the ventricle summons augmentor assistance, when it makes a mighty effort, emptying itself fully, when the attack ceases.

Marked irregularity of the heart's action as to rhythm and force, which may appear in attacks or be persistent (*delirium cordis*), is an occasional attendant of the senile vascular system. Its presence suggests search for a dilated heart. It often appears with mitral stenosis. It is marvellous how long such a high degree of irregularity may exist and the patient keep

about. Dr. Bartlett and I have a gentleman under our care, fifty-nine years of age, whose heart has presented the highest degree of this form of irregularity for nearly three years, yet he goes about most of the time and gives considerable attention to a large business. His heart is moderately dilated.

The subject of heart-pain I have preserved for final notice. It is a frequent and important symptom of the degenerate heart. We read of angina pectoris, of pseudo angina pectoris, and of heart-pain, which is neither of these. I am sure that any gentleman who has not given considerable attention to the subject of heart-pain frequently arises from his journals and books somewhat discouraged by the confusion which reigns in this realm. At least, these are the feelings which have dominated me, and do to some extent at present. Very sharp discriminations between these various accepted forms of pain are made by some writers, notably by Hucard in his recent exhaustive consideration of the subject; but all of the enumerated so-called characteristic features are open to criticism, in view of the numerous exceptions met, and it must be confessed that we frequently meet cases of heart-pain which cannot be classified according to the existing method. We are too apt to look upon true heart-pain as a symptom peculiar to those who have passed the meridian of life, and when a pain, determined as involving the heart, is met in a young subject, it is too frequently dismissed as hysterical. This is a serious error; for while such pain does often develop in the hysterical, quite a percentage arise from cardio-vascular changes of a pronounced character. There are numerous cases reported by the most competent observers proving the existence in the very young of the changes in the heart and arteries which are common to senility. Age, then, does not determine the nature of heart-pain, however much it may suggest. We must, in every case, first of all, exclude, if possible, any extra cardio-vascular condition liable to excite reflex pain, such as gastro-intestinal and hepatic disorders, disease of the uterine organs, intercostal neuralgia, etc.; also certain diseases of the vascular system, notably aneurism, and consider the possibility of tumor and other changes capable of causing pressure upon the cardiac nerves. The practical conclusion one must reach after a careful survey of this subject is, that we may name any heart-pain

angina which cannot be explained by the presence of some cause of neuralgia, whether such cause act reflexly or directly, as from pressure. And regarding this class of cases, I am forced to admit that they do not all present the same syndrome, even in respect to their most pronounced features. You will note this in the following case-histories. I cannot report them fully for want of space, but you will observe that the *relative symptomatic prominence of pain and anguish* (of which much is made in distinguishing between angina and other heart-pains) probably cannot be taken as a test of the nature of the case. The cases selected consist of four which happen to be under my care, directly or indirectly, at the time of writing. Not one of them presents what is generally considered to be the typical syndrome of angina pectoris, yet all are, in my opinion, pain in the heart, without evidence of the existence of conditions which could cause the pain reflexly. Their origin in any of the conditions considered as causes of pseudo-angina seems to be excluded.

A lawyer, æt. 56 years, was a Union soldier during our civil war, contracting at that time a chronic diarrhœa, which has continued, with slight periods of improvement, ever since. For five years past he has been afflicted with heart-pain which had, up to the time of his consulting me, failed to respond in the slightest degree to treatment, although he had employed eminent advice. The pain characteristics are: Its development from exercise, especially from walking; an entire absence of the distressing anguish of angina. His heart is slightly dilated, and arteries abnormally tense and somewhat thickened. He has for some years had a large increase of the quantity of urine (seven pints *per diem* when he came under my care), containing enormous quantities of free uric acid. Upon one occasion the urine was slightly albuminous, but several exhaustive examinations have failed to show tube-casts. The patient is florid, weighs 180 pounds, and has every appearance of health; has not had syphilis, nor has he been addicted to any bad habits. The heart-pain has been relieved considerably, the urine is normal in quantity, nearly free from uric acid, but the diarrhœa has thus far scarcely yielded to treatment.

A merchant, 67 years of age, who had in general enjoyed good health, and was free from a history of syphilis or bad

habits of any kind except overwork, developed general deterioration, with shortness of breath and severe heart-pain. The pain occurred in attacks which were brought on by exertion, especially from ascending stairs. While there was some restlessness attending the attacks, there was absence of the distress which is so marked a feature of what we call angina pectoris. Latterly the paroxysms have developed from walking upon the level, and often without provocation of any kind. The heart is hypertrophied, especially the left ventricle, but there are no murmurs. The urine does not contain evidences of kidney disease, but there are gouty symptoms of a general character.

There can be no doubt but that very many cases of heart-pain, especially those which are ætiologically obscure, are due to gout, and, unfortunately, the pain may exist a long time before some of the tell-tale symptoms of gout appear. In one case, occurring in a middle-aged lady, I looked upon the pain as hysterical until the appearance of Heberden's nodules, when an anti-gouty regimen gave great improvement.

In the remaining two of the four cases referred to the paroxysms of pain are moderately severe, and one has the peculiar distress of angina. This subject of heart-pain is one upon which a small book could be written, and perhaps large ones may be before it is fully understood, and we are able to differentiate its various forms with fair accuracy. In the meantime we must collect carefully-prepared histories of cases, taking care not to narrow our observations to the vascular organs. The relationship of high vascular tension, neuritis of the cardiac nerves, changes in the walls of the heart and aorta, and the circulation of uric acid in the blood, to heart-pain, are problems awaiting solution.

This paper has already been extended to such a length that I must exclude the subject of treatment, hoping to have the opportunity to consider it upon some future occasion. That much is being accomplished in the attempt to arrest senile changes and lessen the annoyance resulting from established pathological changes is undoubted, and it may be possible that the recent startling statements of the illustrious Virchow before the International Congress at Moscow are not too enthusiastic. It is but a few days since this most remarkable man of the century stated, in substance, that he believed the final secret

of life—*i.e.*, how to preserve life alive and protect it against the assaults of disease, resulting in an extension of life rivalling that of the patriarchs of old—would be discovered within the lifetime of many of his hearers.

THE MODUS OPERANDI OF DYNAMIC DRUGS. A THEORY SUBMITTED BY
ONE WHO READS SWEDENBORG.

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IN *The Homœopathic Physician* for March, 1892, under the heading "Swedenborg and Medicine," I spoke of it as possible that we might, through Swedenborg, get light upon the dynamic power of drugs; and I quoted Emerson that Swedenborg "must be reckoned a leader in that revolution which, by giving to science an idea, has given to an aimless accumulation of experiments guidance and form, and a beating heart." In the whole field of science there is nowhere more need of "guidance and form, and a beating heart," than there is in the science of dynamic drugs. I here offer a theory which seems to me deducible from, or in harmony with, what is set forth through Swedenborg.

All life-currents flow from above downward, from within outward. These currents in man give form to, react against, and find basis in that *matter* of which his material body is made. These currents, in any man, outnumber the sands of the sea—are indefinitely more multitudinous than are the individual cells in his body. Each cell has flowing into it innumerable currents from above, and flowing from it innumerable centrifugal currents. When we realize that in each man there is a series of discrete planes, communication between which is only by correspondence (of which more presently); that through each particular on one plane (be it cell, current or what not) are focused innumerable particulars on the plane next above it, we may, though bewildered, form some conception of the multiplicity of life-currents which give form to, react against, and find basis in the material body of any one man.

We speak of discrete planes of descent from the highest

and inmost of man to his material body, and say that communication between planes that are discrete from one another is by correspondence. What is communication by correspondence? The highest plane in man is far above any on which he will ever become conscious. Life-currents, as received from the Creator on that plane, are not at all *en rapport* with the plane next below, and therefore cannot be received upon it. What comes to the second plane are these currents minus their very liveliest part. Thus differenced, the currents are not the same as were received on the highest plane, but *correspond with them*. More and more of liveliness being withheld from the currents as they descend through discrete planes, they become comparatively lifeless on the plane of material substances in the body; but still in the material body there is no detail that has not its correspondence on the highest plane and on every intermediate plane.

When speaking of life-currents as from above and within, we should bear in mind that what takes place on planes above that of matter is not subject to space, and should attach correspondential meanings to the words *above* and *within*. The planes above and within matter are, then, not in space; and into any particular on one plane, be it remembered, are focused myriads of particulars on the plane above. The realities on one or another of these higher planes are those of which one becomes conscious, if prepared to, when he drops the material body.

The highest planes in man are not represented at all in animals—the highest planes in animals are not represented in vegetables—the highest planes in vegetables are not represented in minerals; but in each animal, vegetable or mineral there are currents beyond number—currents descending by correspondence from plane to plane until they form, react against, and find basis in matter—centrifugal currents, too, from within each cell or correspondent of a cell. This focusing of currents from above downward comports with the idea that each particular thing embodies the infinite.

In all the world there is, has been, or can be, no least particle or cell at rest. The rebound or reaction of perpetual currents from above and within against the matter of a particle or cell impart to it an unceasing rhythmical expansion and contrac-

tion of bulk. When we say that such currents *form* the cell into which they flow, we mean more than that they determine its shape. That they, together with a cell's environment, determine its shape is true; but shape is inseparable from matter and space, whereas *form* on interior planes is that quality with which shape corresponds. To such currents, then, is due each quality of a particle or cell; and no one particle or cell can affect others excepting through rhythmical expansions or contractions which mark the rebound or reaction, from matter, of currents flowing from above and within into it.

Various systems of currents may flow into one and the same cell, as distinct from one another as the various systems (nerve, lymph, blood, muscle, bone, etc.) in man. Thus in the mineral kingdom a particle has at least two systems of rhythmical expansion; by reason of one system it has physical properties—by reason of the other, chemical. In the vegetable or animal kingdom a cell has at least three systems of rhythmical expansion, for besides physical and chemical properties it has properties of animal or vegetable life which are due to a third distinct system of currents.

We have noted that particles and cells affect one another only through their rhythmical expansions and contractions. We now further note that no particle or cell affects another excepting through rhythmical expansions and contractions *uniform* in the two; the system of currents which endow a cell with physical properties is *en rapport* with the system of currents giving like physical properties to other cells, but is not *en rapport* with a system giving chemical properties, or with one giving vital properties. Let us note a fact in physics, a fact in chemistry, and a fact in physiology, each of which facts seems to comport with the theory that there is interaction between one and another particle or cell only by reason of rhythmical expansions and contractions that are *uniform* in the two. It is possible by means of one solid body to push along another, because of a rhythmical expansion and contraction *uniform* in the particles of the two bodies, and endowing them each with resistance. These particular expansions and contractions have nothing to do with, for instance, the color of the bodies; color is a physical property, but the rhythmical expansions and contractions to which it is due are not uniform with

those which confer resistance. The chemist observes that various strong acids will not act upon glass, but that hydrofluoric acid will; the explanation offered by the theory under consideration is that the particles of hydrofluoric acid have, while those of other strong acids have not, a rhythmical expansion and contraction uniform with a certain system of expansions and contractions in particles of glass. For the fact that certain food particles become incorporated in one kind of tissue, others in another, as that one particle is taken up into brain, another into muscle, another into bone, another into hair—some into this organ and some into that, the theory before us would assign the reason that interaction between one and another particle or cell is possible only when rhythmical expansions and contractions are uniform in the two. This theory comports not only with the fact that food particles, when in contact with tissues for which they are suitable, become incorporated with them, but also with the fact that particular food particles come for incorporation into contact* with those particular tissues or organs for which they are suitable. The rhythmical contractions and expansions uniform in the food particle and the tissue-cell set up in a medium between the two an undulatory motion which guides the floating food particle to the tissue-cell.

In some minerals, in some vegetables and in some preparations from the animal kingdom are found dynamic properties, by reason of which these substances are *en rapport* with vital processes in man. Such of these substances as do not modify the quality of these processes are wholesome food and drink: such as do modify the quality of them, so that from normal they become abnormal, are dynamic drugs.

Let our further discussion be prefaced by a statement of what the theory under consideration accepts as a universal principle. It is that in the production of any effect there is co-operation from within and from without to the building up of intermediates. This is because currents from above and within can accomplish nothing until they react against or rebound from a basis in matter. For instance:† Currents from

* Probably least particles or cells never come into actual contact, but act upon one another through a medium.

† I am not certain of what I use as facts for illustration in the present paragraph.

above and within form beginnings of the peripheral ends of nerves before forming the cerebro-spinal axis, or the gangliated cords of the sympathetic, or those nerve trunks and smaller branches which are intermediate between centres and periphery. Again, currents from above and within form beginnings of peripheral bloodvessels before forming the heart and the vessels connecting it with those in the periphery. Currents from above and within form the beginnings of leaves, and of vessels and fibres in them, before forming centres in the root, or the vessels and fibres intermediate between the leaves and the root. Remember that these beginnings are mere rudiments, and may be destined to wait long before development—just as in the body of the infant there are the rudiments of whatever is to be a part of the adult's body. When, with a microscope, we watch crystals form, do we not first see peripheral formations, and later see other formations connecting them with a common centre? Do we not see the same thing while watching frost spread upon the window-pane? These examples (of co-operation from within and without to the building up of intermediates) have been altogether on the plane of matter. We have illustrations not altogether on the plane of matter, but extending from above downward and from within outward through discrete planes, when we remember that each least particle of a nerve, a vessel or a crystal, is formed by currents descending through a series of discrete planes, and that to the formation of each particle there is a beginning on the lowest plane before the rebounding current can effect formation on intermediate planes. Another illustration extending through various planes is that all development of intellectual, rational or spiritual faculties is preceded by the formation of a material body, upon which, as a basis, they can rest.

Let us now consider the *modus operandi* of foods and of dynamic drugs in the light of these two principles—1st, that all effects of matter are produced through rhythmical expansions and contractions uniform in the matter affecting and in the matter affected, and, 2d, that in the production of any effect there is co-operation from within and from without to the building up of intermediates. When a food or drug particle approaches a body-cell whose expansions and contractions are

uniform with its own, there is, as it were, a *mutual* recognition. Now this recognition is, in the first instance, dependent upon the material shape of cells and particles expanding and contracting, but presently there arises recognition on a plane above matter; then recognition on higher and still higher planes, until it is on the highest plane common to this particular food or drug particle and this particular body-cell. When there is recognition here, the downward and outward currents uniform in the particle and in the cell coalesce, and from that plane downward this one stream resulting from the coalescence of two is formed, *i.e., qualified*, by currents from still higher planes in the body-cell, so that when it reaches the plane of matter it, forming, animalizes, or, in man, humanizes the matter that has been introduced as food or drug particle, and incorporates it with the body-cell.* This whole process is an exact analogue of what takes place in the world of mind or thought. When we say of a given idea that it is food for thought, we are not using a mere metaphor, but are using a correspondence. Ideas correspond with food: they are to thought what food is to the body. False ideas are food to the perverted mind, but poison to the normal mind. What happens when an idea is presented to you by a speaker or writer? The idea may meet with no response from within you, in which case it is not for you, just as a food or drug particle is not for that body-cell in which there are no currents uniform with its own. If the idea presented does meet with a response from within you, you immediately strip it, so to speak, of the words in which it comes *clothed* to you, you ignore the sounds you heard or the letters you saw, and attend to the idea which the words have conveyed: your interest and recognition are now on a plane above that of words. Your recognition of some ideas presented is confined to comparatively external planes; your recognition of others rises into higher planes. You strip an idea presented of all its wrappings on or beneath the highest plane on which it awakens a response in you. From this plane downward and outward, the streams in the idea you are accepting coalesce with the downward and outward streams in your own mind,

* A similar explanation might be offered of nutrition in plants. I take it that in the mineral kingdom there is something very inconspicuous which is analogous to nutrition in animals and plants.

and this one stream, resulting from the coalescence of two, is formed, *i.e.*, *qualified*, by the currents from still higher planes in your own mind, and when it reaches the lowest mental plane, where is your memory—the storehouse of all the ideas you have made your own—it there not only adds this new idea, but so forms it that it is peculiar to you. The idea which was presented to you, you have re-formed in making it a part of your own thought. Just so a body-cell re-forms the matter of a food or drug particle while incorporating it into the body tissue.

In keeping with this theory of the *modus operandi* of dynamic drugs as pathogenetic agents, would seem the following theory of their *modus operandi* as homœopathic medicines. When a function or an organ is diseased, vital currents descending through it have on some plane become perverted and are, from there downward, abnormal. If I understand the matter, the cure to which a homœopathic remedy is an essential means is an immediate* transformation of those currents from abnormal to normal.† The drug particles in a similar have expansions and contractions uniform with those of the diseased body-cells. These drug particles approaching the diseased body-cells are recognized, and from within and without there is co-operation to the immediate transformation of intermediates and ultimates to normal. That the same properties in drugs are on some conditions pathogenetic and on other conditions curative has its analogue in the world of mind or thought. A falsity presented from without and recognized will be sure to do one of two things—it either will be, in part or in whole, accepted and incorporated into one's thought, or else it will be rejected; in the latter case an inevitable consequence or accompaniment of its rejection will be that similar falsities in the mind of the rejecter will be ejected, or else their hold will be loosened. Such exhibition of falsities from without oneself is an absolute essential to the immediate ejection of those within: as co-operation from within and without is essen-

* The word *immediate* here and further on in this paper does not, of course, predicate anything of time; the "immediate transformation" means simply that there are not several or many steps from the abnormal to the normal state, but that there is only one step.

† For definition of this cure and of other cures, see my little book, *Principles of Medicine*, published by the W. T. Keener Company, 96 Washington Street, Chicago.

tial to the production of any effect, we could not eject falsities immediately from our own minds, were it not for falsities in our mental environment which can affect from without our thought in a way analogous to that in which a dynamic drug particle affects tissue cells in which are rhythmical expansions and contractions uniform with its own. I think, too, that the particular cure of which *similia similibus curantur* is the law can never be effected excepting by a similar.

It accords with the foregoing to recognize *similia similibus curantur* as a law in accordance with which our minds may be cured of falsities, as well as our bodies cured of diseases. Let us remember that, though *similia* is the law of that cure which (in a sense) ranks higher than any other, still there are other principles upon which useful practice can be based.

SOME GENERAL REMARKS ON LOCOMOTOR ATAXIA.

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(Read before the Homœopathic Medical Society of the State of Pennsylvania, Scranton, 1897.)

THE frequency with which locomotor ataxia is observed in practice, and the readiness with which it may fail of recognition in its early stages, always makes it a subject for fruitful discussion. The writer intends, in the following pages, not to advance any new ideas, but rather to give such opinions as have been forced upon him by the observation of a large number of cases treated in private, hospital and dispensary practice. Considering, first, the question of etiology, the relation of syphilis to locomotor ataxia first demands attention. In a paper published in the *North American Journal of Homœopathy* for July, 1886, I took the ground that locomotor ataxia was very frequently of syphilitic origin, 44 per cent. of my cases (38 in number) at that time giving a specific history. In a paper antedating this, and on the same subject (*Transactions of the Homœopathic Medical Society of Pennsylvania*, 1883, p. 68), I remarked, "From the data at present at our disposal we cannot fix certainly the true relation between ataxia and syphilis. That they frequently co-exist is undeniable; that

there is a relation between them of cause and effect cannot be considered as yet as definitely settled." Further experience since these communications has made a great difference in my opinion, until now I give my endorsement to those who claim that a syphilitic history is obtainable with such frequency in ataxic patients that the disease may be called, without distorting facts, "syphilitic ataxia." In other words, *without syphilitic infection the advent of locomotor ataxia is an impossibility.* It is true that a history of syphilitic infection is not obtained in every case. A careful investigation of many of these, however, affords us interesting matter for reflection. For example, I may quote from my first paper, in which I detailed an instance of a patient who denied in the most positive terms that he had ever had syphilis. After the patient had gone, a physician who was standing by told me that he had seen the man treated for syphilis about eight years before. In a private case the existence of a primary syphilitic lesion was denied, and yet inquiry demonstrated, at the age of eighteen, the existence of symptoms which we know can come from scarcely anything but syphilis, while at the time of examination tertiary syphilides were found over the tibiae. Only to-day I examined a patient for hospital admission—a case in which, judging from the note sent me by the attending physician, syphilis had not been suspected. The clear history of lightning pains, Argyll-Robertson pupils, parietic bladder and ataxic gait made the diagnosis unquestionable. The question as to the existence of syphilis being put, the patient replied, "Yes, I had it; but that was fifteen years ago, and it did not amount to much." We have, then, three classes of syphilitic ataxies in whom the existence of specific infection is denied: 1, The untruthful; 2, The ignorant; and, 3, The careless. Such cases are, of course, met with most frequently in dispensary practice. This being the case, it is not surprising that statistics obtained from institutions give a syphilitic history in less than 100 per cent. In private practice I find that practically all patients admit the syphilitic infection.

That statistics relating to syphilis cannot be accepted as strictly accurate is demonstrated by Hirschel's observations. In a large series of undeniable tertiary lesions a history of syphilitic infection was not forthcoming in 30 per cent.

That syphilis is not the only factor in producing the disease is self-evident; but just what the accessory etiological factors are, and their relative importance, cannot be stated. There are individual instances in which exposure, sexual excesses, alcoholism, physical strain, neurotic heredity, etc., have seemed to be important.

The difference between my early and late observations are to be accounted for by increased experience in obtaining information. As I have said in other communications, it is important that any question relating to the previous moral character of the patient should be asked with a positiveness demonstrating that a truthful answer is expected. In many instances the existence of syphilis will not be admitted to the family physician, while the consultant or specialist finds no difficulty whatever in eliciting the truth.

The vast majority of ataxics are males. This fact would seem to negative the syphilitic history, for while syphilis also predominates in that sex, it does not do so in the same disproportion as does the disease under discussion. On this point I have only to say that the accessory causes cannot be as active in women as in men. In all my later female ataxics a syphilitic history was obtainable.

When we come to study the clinical phenomena of ataxia, and study them in their pathological relations, we find that they can be accounted for only by the existence of a widespread, constitutionally-acting cause. Not only is this so in one case, but in all. Then, too, notwithstanding the apparently great symptomatic differences presented by different cases, careful analysis enables us to systematize the phenomena to such an extent that we realize that these differences are more apparent than real, and depend for their existence upon the especial portion of the nervous system to bear the early brunt of the disorder.

The failure of antisymphilitic treatment to cure cannot be urged as a very strong argument against the syphilitic origin of ataxia. Pathologically we know the disease to be a parenchymatous degeneration of nerve tissue; and we know that these parts, when once destroyed, are incapable of repair. Hence, although antisymphilitic measures may, as they frequently do, retard, or even stay, the progress of ataxia, they

never cure. Möbius refers to ataxia as "metasyphilis;" as a disease which *must always* be preceded by syphilis, but in which the ordinary antisymphilitic measures fail of benefit.

The characteristic clinical features of ataxia, *i.e.*, the individual symptoms and their progressive course, are suggestive of a single cause, syphilis again being strongly suggested as that cause.

In years gone by, many of us held the view that locomotor ataxia sometimes followed typhoid fever, diphtheria, and others of the acute infectious group of diseases. Opinions on this subject have undergone a great change, since pathological investigations have demonstrated that these cases of so-called ataxia are in reality examples of multiple neuritis.

The so-called hereditary cases are now well known to be examples of an entirely different disorder, namely, Friedreich's disease.

Leaving, now, the etiology of locomotor ataxia, the study of its symptoms presents itself. In this connection matters relating to diagnosis may also be considered. As a rule, I find that the patient complains first of poor health, giving but little time, until questioned, to particularize his complaints. Such symptoms as neuralgia, rheumatism, weakness, easily tired and nervousness are usually referred to. If the temperament is highly neurotic, the manner of the patient may well suggest hypochondriasis, neurasthenia, or hysteria. When, however, inquiry is made as to the character of the pains, vague expressions lose their indefinite character, and we hear of pains of lightning-like severity and duration, coming at any time, and in any place. Such pains constitute the earliest subjective symptom of ataxia. It may be, indeed, that they exist for years without their true character being recognized, the patient's self-made diagnosis being accepted in routine practice. A history of lightning pains leads me to look at once for the condition of the knee-jerks, the Argyll-Robertson pupil, the static ataxia, and the parietic bladder, the coterie of symptoms which make a diagnosis of ataxia an absolutely correct conclusion. The only case I myself can recall having seen in which these characteristic pains were absent was a doubtful one in which the knee-jerks were preserved.

The knee-jerks I have always (until to-day) found absent in

tabetic patients. This symptom is to be regarded as of great diagnostic importance. With active knee-jerks, I hold that a most careful investigation of the case is required before admitting it to the category of ataxia. In the exceptional case just referred to, the knee-jerk was weakened, and did not promptly follow the blow on the ligamentum patellæ.

The pupillary disturbances of ataxia are not always observed, by any manner of means. The most characteristic of these is the Argyll-Robertson pupils, which I have found clinically in the disease under consideration and in general paralysis of the insane.

At the time the three symptoms above mentioned are present, one nearly always finds the characteristic disorder of movement. In many instances the ataxic gait or the static ataxia must be sought for to be found; in others it is sufficiently obtrusive to constitute an important source of complaint. In any event it is to be regarded as a corroborative rather than as an essential symptom. It is a lack of appreciation of this fact that has led to many diagnostic errors. The common name of the disease, "locomotor ataxia," impresses upon practitioners the idea that ataxia is "the" symptom of great importance, while in reality that phenomenon is frequently absent in the early stages, and is not an uncommon accompaniment of a variety of nervous affections.

Bladder disturbances are frequently encountered in the initial stages of ataxia. The trouble usually shows itself in deficient expulsive power, which, if there is a history of gonorrhœa, is wrongly interpreted to be the result of mechanical urethral obstruction.

Anæsthesia of the extremities is a very common symptom. It has even happened that it is the symptom which drives the patient to the physician for relief. It has seemed to me that cases in which the anæsthesia is a source of great annoyance are those which progress the most rapidly, and that aggravation of this symptom is attended or followed by aggravation of the whole case. The same remark applies with less force to the lightning pains, a fresh accession of which sounds a warning of other ills to follow. The onset of an intercurrent illness seems to bring on anew the lightning pains which have been quiescent.

While the eye-symptoms of ataxia, the optic-nerve atrophy, and the ocular palsies are far from uncommon, it is my experience to have met with them but seldom. This is explained by the fact that such cases generally consult the oculist rather than the neurologist. It is an interesting observation that cases in which optic-nerve atrophy constitutes an early symptom are not likely to progress to a high degree of ataxia. The ocular lesion nearly always proceeds to complete blindness, but the spinal symptoms become non-progressive.

Diagnostic errors as to locomotor ataxia arise from two sources. The first and most commonly encountered is insufficient investigation. While the patient complains of the pains, and is able to describe them accurately, he usually refers to them as rheumatism, and his explanation is accepted without investigation by his physician. The other source of error lies in a misconception as to what constitutes locomotor ataxia. It must be borne in mind that the ataxia is by no means an early symptom of the disease, and yet it is generally regarded as the most important, probably because it has given the name to the disorder. One is well justified in diagnosing ataxia when he finds the following conditions: A syphilitic history, absent knee-jerks, lightning pains, Argyll-Robertson pupils, and a parietic bladder. Indeed, I am not sure but that I should feel safe in prophesying the onset of ataxia in a syphilitic patient whose knee-jerks had disappeared. I certainly should diagnose the disease on the association of lightning pains with absent knee-jerks.

Cases present marked differences in their rates of progress. Some progress but slowly, or remain stationary for years. One of my cases, whose gait is anything but steady, is no worse to-day than he was fifteen years ago. Another case, that of a woman, was up to her last report slightly better than for a number of years. On the other hand, we meet with cases which proceed rapidly from bad to worse, going on to complete disability within a year. For a time I was inclined to regard such cases as not true locomotor ataxia, but further experience has led to a change of opinion. Certain symptoms seem to vary in intensity from time to time. Thus, ocular palsies not uncommonly disappear. The lightning pains may be a source of suffering for weeks, and then remain away for months. Sexual

inability may be regained for a time. A paretic bladder may regain its power. Occasionally improvement is noted in gait.

The prognosis of locomotor ataxia must be regarded as decidedly unfavorable. The disease is a progressive one. Still I am satisfied that something can be accomplished by treatment. At the outset it is important that one realizes the hopelessness of cure, and endeavors to do only that which is possible without harming the patient. Antisyphilitic treatment is permissible only in the pre-ataxic stages, when it may do good. Iodide of potassium and the mercurial preparations are alike important. One must not expect too much from them, nor must he persist in their use in the face of failure.

Absolute rest in bed, with massage, is the only means by which rapidly-progressing cases can be stopped in their course. Of the value of this measure I am convinced, notwithstanding the claims of eminent authority that absolute rest is to be condemned, because of an alleged increase in the changes in the spinal cord by the recumbent position. The attendant must protect himself, however, when he orders rest, for it may happen that the case is not benefited by the treatment, and the patient, getting up after three months' confinement in bed, may attribute his aggravated condition to the treatment, instead of to the natural course of the disease.

The symptom which calls for palliative treatment is the lighting pains. In such cases, while belladonna, nitric acid and other remedies are useful, cases occur in which physiological medication is necessary. My main reliance for relief is acetanilid, which may be given in from five to ten-grain doses. In the majority of cases this is all that is required. Sometimes one finds that phenacetin or antipyrin acts better than acetanilid. It may be that all of these drugs fail to relieve. Then I have of late resorted to methyl blue, giving three grains of the drug in capsule each evening. Although less immediate in its results, this seems to have a more permanent effect in the way of relief than other remedies. Care must be taken that one gets a chemically pure preparation; that manufactured by Merek, and labelled "chemically pure; free from chloride of zinc," should be employed. The patient must be warned of the effect of the drug on the urine. Under no circumstances should morphia be resorted to for ataxic patients. I say this

because I have seen probably a dozen cases of ataxic patients with the morphia habit brought on by the administration of the drug for the relief of the pains. It has always seemed to me that recourse to morphia for the relief of lightning pains is a most doubtful expedient. I have thus far succeeded in avoiding its use in what may be called fresh cases. There can be no doubt that morphia will prove efficient in giving relief; but it is almost certain that its repeated administration must bring on the morphia habit.

Exercises carefully supervised seem to have some effect in reducing the ataxia. It is a good plan to draw some simple figure on the floor, after which the patient endeavors to trace out the lines of the same with each foot in turn.

Suspension I have never tried. Whatever benefit follows this measure is probably the result of suggestion.

With hydrotherapy I have had but little experience. The application of hot-water bottles to lumbar spine has been recommended as a means of relieving the lightning pains, but this measure has not proven satisfactory in the few cases in which I have tried it.

Electricity in the shape of galvanism to the spine and the faradic brush to the anæsthetic parts seems to do considerable good in slowing the course of the disease. Faradic stimulation of the skin certainly brings temporary relief of anæsthesia and improvement in walking.

The most efficient medication in locomotor ataxia is that which treats symptoms and conditions as they arise. In the absence of other than the characteristic symptoms which constitute the clinical picture of the disease, *argentum nitricum* 3x and the *chloride of gold* and *sodium* 2x will be found the most generally useful remedies, although *phosphorus*, *zinc*, *picric acid*, *nux vomica* and *strychnia nitrate* are by no means to be ignored.

SULPHUR IN GLANDULAR ENLARGEMENT.—Swelling, induration and supuration of the inguinal, axillary and submaxillary glands, also of the cervical and even cutaneous glands, either from scrofula or in consequence of some cutaneous disease, such as scarlatina, etc., or from abuse of mercury.

A CASE OF LIVING LARVÆ IN THE EAR.

BY FRANK H. PRITCHARD, M.D., WEAVER'S CORNERS, OHIO.

WHEN flies deposit their eggs in the auditory meatus it is nearly always found that the fly has been attracted to the ear by a bad-smelling discharge. The larvæ adhere very tenaciously, and are frequently quite difficult to dislodge, as they are so active as to squirm and dodge about, evading the ear-forceps.

I was consulted some time ago by a middle-aged farmer, who complained of a painful sawing noise in his left ear, which he attributed to a fly having crawled into his ear some few days before; he had succeeded, at that time, in dislodging the fly, after some effort.

The ear-speculum revealed two robust and active maggots which could not be grasped with the ear-forceps. Having read of a mild solution of carbolic acid as useful under such circumstances, I immediately syringed the ear with a 2 per cent. solution. This caused the maggots to tumble, without ceremony, into the basin, where they soon stiffened out. There were only two, but they gave the patient a great deal of distress while they were in the meatus. He had had a foul-smelling discharge from the ear, though it was slight, which had persisted two years.

Dr. W. Baxter—*Archives of Otolaryngology*, vol. XX., No. 1—reports a case which differs somewhat. The patient, a farmer, feeling a fly enter his ear while mowing, removed it dead, with a stalk of grass, and probably pressed out some of the eggs in doing so. Four days later the ear was examined and found to be full of active larvæ, which were easily removed by gentle syringing. The membrane was abraded, but not perforated, and soon appeared perfectly normal again. He had had no discharge to attract the fly.

Dr. W. H. Winslow—*The Human Ear and its Diseases*, p. 157, 1882—states that maggots have often been developed from eggs within a dirty, suppurating ear. He recommends filling the ear with sweet-oil and syringing. He mentions a

German physician who reported a case in which he had tied a piece of fresh beef over the ear, and in a few hours he removed the meat, containing all the maggots.

Prof. Josef Gruber—*Lehrbuch der Ohrenheilkunde*, Vienna, 1870, p. 418—mentions the common house-fly as especially prone to lay its eggs in the external meatus.

DISPENSARY ABUSE—RESULT OF AN INVESTIGATION OF OVER ONE THOUSAND CONSECUTIVE CASES.

BY EDMUND H. KASE, M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania, Scranton, 1897.)

THE purpose of this paper is simply to present the result of an analysis of 1058 consecutive cases who applied for treatment at the Hahnemann Hospital Dispensary, Philadelphia, Pa., beginning June 17, 1897, and ending July 8, 1897, inclusive, together with a few thoughts and observations bearing on this subject.

I do not flatter myself that upon this question, which has so recently received such thorough and wide-spread discussion and attention by the medical societies and associations in nearly all our leading cities throughout the country, I can either throw any new light or adduce any new facts. As the subject has engaged so much attention and provoked so much dispute, however, among all classes of the medical profession, many of whose statements seemed to be so widely at variance with the facts of the case, I was led to investigate the matter carefully, and considered the time for such action could not be more opportune. No careful observer of the medical relief of the poor as looked at through the dispensary medium, and the periodical agitations of the subject, can fail to admit that there must be an evil somewhere.

Believing, as I do, that no gauge or measure, rule or requirement can be constructed by which standard all cases can be judged properly, I endeavored to consider each person a class unto himself, and by careful questioning and cross-examination

elicited all the facts possible bearing on the individual case. I am ready to admit the possibility of inaccuracy, misinformation and deception; at the same time, in the absence of evidence to the contrary, aided by investigation into some doubtful cases, with negative results, I am ready to accept the statements as a whole as fairly accurate, and altogether such as might be expected from the average person interviewed alone, especially when combined with efforts of mutual interest and confidence. And as I watched the expression of the countenance, and caught occasional signs of approaching tears and evidences of smothered mental emotion, I must confess I was particularly well satisfied with the frankness of manner, and heartily glad when my task of prying into the affairs of a multitude of good and deserving people was at an end.

All of the 1058 cases who applied for treatment during the period mentioned were required to give the following information, viz.: the name; address; age; married or single; occupation; average amount of cash received per week by applicant, from occupation or otherwise, during the past year; average amount of cash received per week by all other members of the family, from occupation or otherwise, during the past year; average aggregate cash receipts per week for the past year, in said family; number of persons in said family supported from the aggregate cash receipts; property or real estate owned by the said applicant or family; department to which the applicant was sent. In only three cases was I unable to get full information; one was a foreigner, another was intoxicated, and the third was too young to answer the questions. The original record from which these facts have been taken is now on file in the dispensary department, and is open to private inspection and investigation by members of the medical profession. This record also contains some general remarks, suggested by special features of some of the cases, relative to support; intoxication; separation of husband and wife; chronic incurable ailments and deformities and afflictions of mind and body, interfering with occupation, etc.

The result of the analysis is as follows:

	Medical.	Children.	Eye.	Chest.	Surgical.	Orthopaedic.	Throat.	Women.	Skin.	Ear.	Nervous.	Veneral.	Obstetrical.	Total.
CLASS 1.—Patients <i>very poor</i> , evident pauper class; children and elderly people who with difficulty are able to find their daily bread and shelter; includes those out of work most of the time during the past year,	27	5	6	5	9	...	5	3	5	3	6	12	...	86
CLASS 2.—Patients who have no one to support but themselves, and whose aggregate cash receipts during the past year have averaged less than \$8 per week,	50	...	18	3	29	5	14	11	11	4	3	24	...	172
CLASS 3.—Patients who have no one to support but themselves, and whose aggregate cash receipts during the past year have averaged \$8 and upwards per week (includes cases receiving as high as \$12 per week),	6	...	3	...	16	2	2	...	5	...	4	4	...	42
CLASS 4.—Patients who have no one to support but themselves, and whose aggregate cash receipts during the past year have averaged over \$12 per week (includes cases receiving as high as \$15 per week),	1	...	...	1	2	...	...	...	...	...	...	...	...	4
CLASS 5.—Patients who have no one to support but themselves, and whose aggregate cash receipts during the past year have averaged over \$15 per week, . . . . .	...	...	...	...	1	...	...	...	1	...	...	...	...	2
CLASS 6.—Patients who have no one to support but themselves, and whose aggregate cash receipts during the past year have been from \$3 to \$5 per week, including board,	15	...	3	...	11	...	3	4	1	...	1	2	1	41
CLASS 7.—Patients who have no one to support but themselves, and whose aggregate cash receipts for the past year have averaged more than \$5 per week, including board,	2	...	...	...	2	1	...	...	...	...	...	...	...	5

	Medical.	Children.	Eye.	Chest.	Surgical.	Orthopaedic.	Throat.	Women.	Skin.	Ear.	Nervous.	Veneral.	Gynaecological.	Total.
CLASS 8.—Patients from families with two or more to support, in which the aggregate cash receipts for the past year have averaged \$10 or less per week,	131	63	61	22	108	10	36	29	25	15	20	20	3	543
CLASS 9.—Patients from families with two or more to support, in which the aggregate cash receipts for the past year have averaged more than \$10 per week, and less than \$12 per week,	5	3	5	...	8	...	6	...	...	...	...	1	...	28
CLASS 10.—Patients from families with only two to support, in which the aggregate cash receipts for the past year have averaged \$12 per week and upwards (includes cases receiving as high as \$15 per week),	8	...	2	1	5	...	...	1	2	2	1	2	1	25
CLASS 11.—Patients from families with only two to support, in which the aggregate cash receipts for the past year have averaged over \$15 per week, . .	1	...	...	...	3	1	...	1	...	1	...	...	...	7
CLASS 12.—Patients from families with three to support, in which the aggregate cash receipts for the past year have averaged \$12 per week and upwards (includes cases receiving as high as \$15 a week), . .	...	...	...	...	3	...	2	1	3	...	1	1	...	11
CLASS 13.—Patients from families with three to support, in which the aggregate cash receipts for the past year have averaged over \$15 per week, . .	...	...	...	...	1	...	...	...	...	...	...	...	...	1
CLASS 14.—Patients from families of four to seven to support, in which the aggregate cash receipts for the past year have averaged \$12 per week and upwards (includes cases receiving as high as \$15 per week),	9	4	13	...	17	3	3	...	9	1	1	4	...	64

	Medical.	Children.	Eye.	Chest.	Surgical.	Orthopaedic.	Throat.	Women.	Skin.	Ear.	Nervous.	Veneral.	Obstetrical.	Total.
CLASS 15.—Patients from families of four to seven to support, in which the aggregate cash receipts for the past year have averaged more than \$15 per week (includes cases receiving as high as \$18 per week),	2	...	2	1	6	...	...	1	...	...	...	...	...	12
CLASS 16.—Patients from families of four to seven to support, in which the aggregate cash receipts for the past year have averaged over \$18 per week,	1	...	1	...	2	1	...	...	1	...	...	...	...	6
CLASS 17.—Patients from families of seven to twelve to support, in which the aggregate cash receipts for the past year have averaged \$12 per week and upwards (includes cases receiving as high as \$18 per week), . . . . .	...	...	1	...	3	1	...	...	1	...	...	...	...	6
CLASS 18.—Patients from families of seven to twelve to support, in which the aggregate cash receipts for the past year have averaged over \$18 per week, . . . . .	...	...	1	...	1	...	...	...	1	...	...	...	...	3
Grand total cases, . . .	258	75	116	33	227	24	71	51	65	26	37	70	5	1058

A still further analysis of the information secured in this series of cases under the question of property and real estate reveals another very interesting phase in connection with this study, as indicated in the following review :

CASE 5, Class 8, owns a house assessed at \$2000 on which there has been paid \$1500. The case is a woman, separated from husband; keeps house for a relative and receives \$3 a week with board.

CASE 13, Class 17, age 17 years. Father owns a home valued at \$1800. Family of 8. Aggregate weekly cash received, \$12.

CASE 16, Class 16. Hackman. Averages \$25 per week. Keeps horse and assists to support family of 5.

CASE 24, Class 15, age 15. Father owns house. Value, \$2200. Six in family. Aggregate weekly cash, \$13.

CASE 43, Class 8, age 69. Owns house valued at \$800. Four in family. Aggregate weekly cash receipts, \$10.

CASE 81, Class 10, age 58. Lives on his income (self and wife), \$15 per week, from property, stocks, etc.

CASE 97, Class 8. Widow, age 76. Owns house, value \$3000, in Lancaster County.

CASE 124, Class 10. Two in family. Owns house valued at \$800. Aggregate cash received per week, \$12.

CASE 171, Class 14. Owns house valued at \$3000. Five in family. Aggregate cash received per week, \$14.

CASE 176, Class 14. Father owns house valued at \$1200. Six in family. Aggregate cash received per week, \$12.

CASE 197, Class 2. Owns house, valued at \$3000. Out of work. Supports self only.

CASE 234, Class 14, age 18. Father owns home valued at \$600, in small town.

CASE 255, Class 8. Family 2. Has paid \$700 on his home.

CASE 297, Class 14, age 13. Father has paid \$600 on home. Weekly cash received in family, \$12.

CASE 301, Class 8. Husband is a sailor, and supports her and owns a home valued at \$250, in Nova Scotia.

CASE 319, Class 2. Widow, 61 years old. \$1000 paid on home. Care of self only.

CASE 326, Class 2. Owns 2 houses valued at \$2000 and \$1200. Widow, aged 59.

CASE 337, Class 8. Child, orphan. Cared for by grandfather, who owns home valued at \$2000, and receives \$10 per week from his occupation.

CASE 398, Class 8. Owns farm valued at \$1000, in Berks County.

CASE 451, Class 14, aged 18. Mother owns \$10,000 property; is a widow.

CASE 458, Class 8. Out of work. Family of 5. Owns \$1000 property.

CASE 502, Class 18. "Supports family of 9 on income." Brought by the family physician.

CASE 545, Class 14. Owns \$4500 house. Aggregate cash received per week, \$12. Invalid father. Five in family.

CASE 608, Class 16, age 18. Father owns \$5000 home and \$5500 investment. Family of 6.

CASE 695, Class 17. Father owns \$3000 property. Family of 10.

CASE 765, Class 8. Owns \$4500 property. Out of work. Family of 4.

CASE 768, Class 8. Owns \$200 farm near Newark, N. J.

CASE 785, Class 2. Widow, 75. Owns \$4000 home. No other help.

CASE 805, Class 8. Owns \$4000 property. Family of 8. Weekly cash, \$10.

CASE 844, Class 8. \$800 paid on home. Family 5. All out of work.

CASE 848, Class 18, age 17. Mechanical student. Father owns \$75,000 properties and upwards. Family of 8.

CASE 850, Class 9, age 18. Mother, widow. Owns \$3000 home.

CASE 874, Class 9. \$300 paid on house. Family of 6. Weekly cash, \$12.

CASE 903, Class 15. Owns \$2000 home. Family of 5. Weekly cash received by family, \$15.

CASE 958, Class 2. Widow, 54. Owns \$200 on a house.

CASE 969, Class 8. Owns home, value \$1500. Family of 5. Aggregate weekly cash received, \$10.

CASE 972, Class 14. Owns home, value \$3000. Family of 4. Aggregate weekly cash, \$14.

CASE 1025, Class 8. \$600 on a home. Family of 4.

CASE 1034, Class 15. Owns \$4500 house. Family of 4. Keeps hat store.

This number of consecutive cases seems sufficiently large to constitute a fair average for the entire year. Thus one can readily see, from the foregoing, just what class of patients are receiving treatment at this dispensary. Except in very rare cases, treatment is always given indiscriminately to all who apply; and this is generally true in nearly all other large dispensaries, and especially those connected with hospitals and colleges. Therefore the above analysis may be taken as a fair index of dispensary work generally. Any modification would, doubtless, largely depend on the location and general surroundings of the institution.

It is not my purpose in this paper to say who are or who are not appropriately deserving of medical service through the dispensary medium. This is, indeed, a difficult and delicate problem to solve. Without fear of contradiction, however, I feel safe in saying that the great majority of physicians, as well as laymen, would hardly claim that all of the above 1058 people were deserving of free medical service; on the contrary, all will agree that there are some among this list who *should* not be allowed to partake of dispensary aid, being totally undeserving of such charity; and some means, therefore, should speedily be applied to correct this abuse, however small it may be, which tends to a wrong diversion of funds, and is an open bid for pauperism and dependence; and, furthermore, medical relief of the poor is part and parcel of that greater problem which confronts the educated world to-day.

I deeply regret that I have not words at my command to adequately express my feelings of intense satisfaction and gratification at the immense amount of good work accomplished by this dispensary in assisting a large class of worthy people, even though regularly employed, whom it would be a crime and disgrace to call paupers. I refer to the American mechanic and laboring man. The careful study of each of these individual cases alone, together with all of its special features, reveals an interesting and commendable degree of thrift in the working-classes, manifested under the most adverse circumstances, in trying to get along; for this is, indeed, a cold world, and now, as in the past, let it be the glory of the medical profession to consider and assist this class of working-people, who, with much self-denial and absence of many necessary comforts, endeavor to get on in the world, raise a family, provide a comfortable habitation for them, and maintain good citizenship and self-respect, which class, it seems to me, are well worthy of all the encouragement and sincere respect at our command; and to minister to *their* needs faithfully and skilfully should be the desire and aim of every dispensary physician—much more so than to the real pauper class, which includes a large proportion of the dissipated and tramps, whom we all support. And while we are wrestling with the problem what they are good for, and what to do with them, we often find ourselves guilty of actually coddling them.

We cannot estimate the ability of persons to pay for medical assistance by what money they receive alone; that for which the same must be expended in the support of family or other necessary affairs of life must be considered as well.

Again, we must not forget the improvident element that enters so largely, in different degrees, in the mental make-up of all of us. This we must not lose sight of in dealing with the dispensary question. No matter what wages are earned, or how large the compensation given to many people, somehow or other they do not get along well, and let me add, unfortunate as it sounds, can't help it either, and yet they can neither be called poor nor of the pauper class. Such persons, as we all know, are constantly behind in their financial obligations, although themselves wishing the result otherwise; consequently, when they need medical help are entitled to it, and especially those dependent upon them for support.

Another feature of the dispensary problem is, as stated to me in a recent interview on this subject, "Everybody gives; therefore everybody can and should receive medical aid, if he chooses to ask for it." While this is only in part true, yet we must bear in mind the fact that immense sums of money are raised among the public for the support of these institutions by fairs, entertainments, donations, receptions, teas, etc.; by private and corporate aid, as well as by large revenues from the State, which latter represent a form of taxation to which many more are compelled to pay tribute. Now, as there is nothing in the charters under which these institutions were created limiting the medical treatment to any particular class, there has naturally grown up a feeling among a large element of said contributors (however small the amount) that they were in a measure owners, or stockholders to a degree, at least, and evidently feel, whatever their financial circumstances, favorable or otherwise, that they have a right to receive some of its benefits, and oftentimes are energetically working and using their influence to send others, regardless of their (the patients') ability to pay a physician. The same impression is sometimes evidently in the minds of physicians, directors, and managers of hospitals and dispensaries, judging from the character of the cases occasionally sent in.

Directly in connection with this phase of the dispensary

problem, viz., that of asking for and receiving aid indiscriminately, brings to mind the complications arising from contributions received from railroad corporations, immense manufacturing establishments, large business houses, great iron and machine works, etc., where in each of which large numbers of persons are employed, from the owners and management down to the commonest laborer. Such corporations and establishments as above enumerated, and many more of various kinds, are asked to contribute; the result is that they do, and usually with the understanding that in return for the same, medical service is to be supplied to such of their employees as they may choose to send. This, of course, is only natural, and the result is that a large army of the regularly employed find their way to the dispensary. To indicate to your mind more thoroughly the facts set forth here, let me relate an incident bearing on this subject, in connection with our work in 1893. Among a number of sick and accident cases from a large neighboring establishment were two cases requiring treatment, and holding blank certificates from some beneficial society or association, and requesting the attending physician to fill them up, stating the nature of the illness, accident, etc. Inadvertently, through one recently appointed on the staff, and consequently inexperienced in such matters, a charge of fifty cents each was made for filling up said certificate, and turned into the dispensary revenue. This created a storm, accompanied by a demand from the *firm* that the money be refunded. This, of course, was promptly complied with.

Following up this line of thought, we arrive at another source of dispensary abuse, viz., that of the accident departments of our hospitals, open day and night, and acting as feeders to the hospital and dispensary. The plan of taking a person, suddenly overcome by illness or accident, without delay to the nearest hospital, for obvious reasons is a good one; and, thanks to the modern method of patrol and ambulance service, the work is done in a remarkably short space of time, and thus the duty we owe to humanity is greatly facilitated. Without regard, however, as to who the patient is, whether millionaire or pauper, or to whatever station in life, socially, financially or otherwise, he belongs, when able to leave the institution he is given the time and place of the dispensary department, and

is told to call there for further treatment and attention—not being questioned as to his own feelings as to whether he would not like his own family physician to take charge of the case, now that his present needs have been attended to. The consequence is that some well-to-do persons find their way into the dispensary, much to their own surprise and chagrin, and sometimes not without feelings of anger—a circumstance that I have not infrequently witnessed. Thus the first step in the process of weaning the well-to-do patient from his own family physician, and that usually at first against his own will, and forthwith installing him as a full-fledged and regular dispensary patron, is accomplished. In connection with this, let me say that the habit of physicians in sending their private patients to dispensary specialists for free examination and treatment in a special direction, and asking for opinion and report of diagnosis and directions for further treatment and management, should be stopped. Let such cases as are obviously well removed, socially, from that which should constitute the dispensary class, be sent to the private office of the physician whose opinion he desires, with a note stating that the bearer can only pay a moderate fee, and thereby assist in providing more time and money for the treatment of those more unfortunate.

Following all this experience, is it any wonder that these same patients whom we have invited, or caused to be invited, invite *their* friends in the counting-house or shop to go and partake freely of that for which they heretofore have been willing to pay? And let me ask you, in all earnestness, who is to blame? Surely, with these facts held up to view, you will not join with those writers who have not given any special attention to the details of the subject, and consequently are entirely ignorant of how these conditions of abuse originate, when in their broadsides directed against the modern dispensary (in times of depression due very often to an overcrowding of the medical profession), they call these people “impostors,” “robbers,” “liars,” “thieves,” “cheats,” “frauds,” and “persons of contemptible meanness,” etc. I wish to embrace this opportunity to emphatically protest against the hurling of such epithets, in the face of the true facts and circumstances as already related, against a class of innocent people more sinned against than sinning, and to deny the bold statements recently made, entirely

unsupported by facts, that "fully 50 per cent. of the patients who apply for free medical aid are totally undeserving of such charity;" that "the institutions in question are crowded daily by hundreds of well-to-do patients, who are encouraged to defraud the really poor and cheat the charitably-disposed doctor of his legitimate fee;" further, that "medical charity is now a bloated mass of rottenness that extends to the very core of laudable intentions." Again I ask you, does the analysis of this thousand and more cases indicate such a lamentable significance in the Hahnemann Hospital Dispensary of Philadelphia? It is hardly necessary for me to say *no*. The facts of the case completely disprove the malignant libel on such meritorious work.

In most of the recent discussions, and in the literature that has appeared on the subject, considerable injustice has been done many a worthy patient through the fallible method of judging by appearances, thus leading to grave errors—at times ridiculously and painfully uncharitable, and quite unworthy the good name, mental calibre and dignity of the medical profession. Such a superficial and exclusive method of treating this delicate subject cannot be condemned too strongly. Have we arrived at the time when a person unquestionably entitled to dispensary treatment must not appear in public or at the dispensary tastefully adorned; in good clothing, or even jewelry, possibly saved from the wreck; or, as is often the case, wearing the best of apparel given by kind friends and relatives; or the clothes, including the much-talked-of seal-skin sacque, handed down from deceased relatives, or possibly a deceased sister? Let me ask *you*, who know something of the adverse circumstances of this life, and know well, what happens to a man or a woman who fails to keep up a respectable appearance? Is it not possible for such a person, as well as a man neat, clean-shaven, and well and comfortably dressed, to be a proper subject for dispensary aid? Must men or women in times of adversity be compelled to sell everything they possess, including many of those things which make life pleasant and comfortable, as well as adorn and make possible a respectable appearance, in order to be able to consult the doctor in his private office, and refrain from patronizing the dispensary? Is it not possible for a person to keep within the bounds of dis-

dispensary propriety and ride on the car, or even the bicycle, without having his affairs pried into? If the medical profession has arrived at that degree of poverty and helplessness, I have not yet learned it.

In conclusion, let me say that, from my position as executive officer, and having been brought face to face with nearly 100,000 new patients during the past few years, I believe that the cause of over 90 per cent. of the dispensary abuse can properly be placed at the feet of the benevolent medical profession, who for ages past, by their deeds, have been constant, living examples that charity was the greatest of all the virtues. The first consideration with the physician is the satisfaction of performing a bounden duty to humanity, which to him is a satisfactory equivalent; and it is not, as in the other liberal callings, a question of money. With these feelings and noble sentiments born in us and ever before us, is it any wonder that we have oftentimes, by manner, given the impression to those about us that *all* the sick and suffering are *welcome* to come to the dispensary and hospital? The case is made more plain, and the position of the physician more clear, when we consider the secondary purpose for which the hospital and dispensary are maintained, viz., to gain clinical material for medical teaching, and to give unlimited experience and facilities to physicians and students to acquire the highest skill in the study and practice in the most noble of arts.

All the foregoing facts, and last, but not least, the attendant element of competition with rival colleges and institutions, very nearly complete the picture of the cause of the inevitable abuse of the dispensary which has grown up while the profession itself has been an unwilling witness.

To correct and eliminate the existing evils and defects, and bring the problem to a successful solution and termination—in view of the rivalry and active competition which exists between the different hospitals and dispensaries—will require, first, a definition as to what constitutes a dispensary patient, and, second, its recognition and understanding, and a general co-operation on the part of all institutions in a city on this point, as well as general reforms along the line of organization, government, and general and detail management, without which dispensary abuse will continue to grow proportionately worse—a result inevitable with a continuation of the present methods.

THE AMBULANT TREATMENT OF FISTULA IN ANO.

BY F. WALTER BRIERLY, M.S., M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania, Scranton, September 21, 1897.)

To the average lay mind every affliction of the rectum or anus comes under the sweeping classification of "piles." It is said that 90 per cent. of the adults in this country indulge in the luxury of this venous enlargement, yet Matthews sees nearly as many cases of fistula as of hæmorrhoids. On the other side of the water two-thirds of the cases operated by Allingham at St. Mark's were for fistula. It may be taken for granted, then, that the average practitioner has a number of these cases presenting themselves for treatment. The ideal method we all know is the hospital and the complete operation; but many cases, from fear, inability to leave business, etc., will not submit to this procedure. I wish, then, to present to this Society a method of treatment which I have followed successfully for a number of years, which can be carried out at the office, which causes the patient but little pain, and leaves him free to follow his usual occupation.

Examine the patient as thoroughly as possible without giving him pain. Pass the grooved director into the external opening of the fistula, then insert the finger into the rectum. If the finger be passed first, the tract will be made tortuous by the contractions of the sphincter (Keen & White). Now, bearing the landmarks well in mind, anæsthetize the patient, using the Grigsby inhaler. Paralyze the sphincter with a large Pratt bi-valve speculum, insert the grooved director through the main sinus, and with a sharp knife split up the tract and sever the sphincter, but sever it in *one place only*: then curette the bottom of the wound and apply hydrogen dioxide, pure (Goldsmith). Pack the wound lightly with gauze and put on a T-bandage. This whole operation, including the patient under the anæsthetic, should not take longer than five minutes.

The after-treatment consists in cleanliness. In such a place as this an antiseptic that is non-toxic had better be applied, or

its absorption may prove dangerous. If there was but one tract of the fistula, when the wound heals our work is done. This, however, is not apt to be the case. As the wound heals we find the "pink spots" (Kelsey), which we would look for were we doing the complete operation. These will be found to contain a little pus and to be the openings of other fistulous tracts. The wound will never completely heal as long as these remain. In operating them a general anæsthetic is unnecessary. First cleanse thoroughly, then cocaineize carefully. Of late I have been using eucaine for this work, and it can be used with less fear of danger than cocaine. The parts anæsthetized as much as possible, insert the grooved director and cut *quickly*. Careful and even injection into the tissues and the quick cut are the secrets of successful operation without a general anæsthetic. It is almost impossible to produce complete anæsthesia in tissues that are infiltrated like the bottom of a fistula, but the operation causes little pain if the hints given are followed.

This operation must be repeated as often as there are sinuses, waiting each time until the wound made at the previous operation is nearly healed. If the patient will not take ether for the first operation, or for any reason ether cannot be given, it may be done under eucaine or cocaine. General anæsthesia by the Grigsby method is preferable, however, as it permits a thorough stretching of the sphincter. In nine cases out of ten the patient is ready to walk out of the office in a half-hour after its use.

While the patient is under surgical treatment he should be built up in every way possible, and a good diet, careful hygiene and the indicated remedy will do much toward making our other methods successful. Though many of the patients having fistula have pulmonary tuberculosis, the old idea that phthisis is a contraindication to operation is long since exploded. Judge the patient's ability to stand the operation by his general condition. Recent researches showing the great prevalence and the thorough curability of tuberculosis should certainly encourage us to eradicate every local infection within surgical reach.

CAMPHOR ANTIDOTE.—For ill effects of large dose, give *black coffee* until vomiting sets in; afterwards opium 6, in water, every hour.

GALVANISM IN XANTHOMA (XANTHELASMA); ILLUSTRATED BY A
CASE.

BY HORACE F. IVINS, M.D., PHILADELPHIA.

(Read before the Homœopathic Medical Society of the State of Pennsylvania, Scranton,
September 22, 1897.)

THIS rather unusual facial blemish generally appears about middle life, rarely before; and although it is not, in any way, locally irritating or harmful, its presence is a cause of much annoyance to its owner, particularly if she be a society woman. Text-books recommend but one method of treatment, namely, excision, if that can be performed without causing ectropion. Although xanthelasma is the term usually employed, xanthoma is the more correct word, as will appear from the following definitions, as given in Foster's *Medical Dictionary*.

"*Xanthoma*.—A neoplastic disease of the skin, occurring most commonly, though not always, near the inner or outer canthus of the eye and, usually symmetrically, in the form of soft elevations or flat patches of a light- or dark-yellow color, due to new formations of connective-tissue, together with a deposit of fat in the corium and subcutaneous areolar tissue."

"*Xanthelasma*.—A very rare pathological variety of xanthoma, in which there are developed first, nodosities, and afterward tumors, varying in size from that of an almond to that of a hen's egg, and generally lobulated."

CASE.—In 1894 a maiden lady, a decided brunette, age forty-five years, consulted me in reference to a slight intraocular defect. At an early subsequent visit she spoke of the xanthomæ which had given her much mental discomfort, but supposed I could do nothing for these disfigurements, as she had been told that they were too large to be operated upon. The two ovals, slightly elevated, yellow tumors—one on each right lid, near the inner canthus—were nearly equal in extent, each measuring $\frac{7}{16}$ by $\frac{5}{16}$ of an inch. On the left lower lid, near the nose, were several yellow points, with a clearly-cut outline, which was larger than the patches on the right side. The well-defined and very conspicuous tumors on the right lids had manifested themselves about two years before Miss ——'s

first visit to me, and which, she said, began much as the left then was. The right patches were slowly increasing in color, thickness, and circumference; and according to the report, the left lid had grown perceptibly worse within the last few weeks. Owing to the size of the patches—which if excised must result in eversion of the lids—I advised against the usual cutting operation. Electrolysis was discussed, but as, after the destruction of moles, etc., I had sometimes seen slight depression or redness, I could not promise complete success. My doubts were apparently confirmed in the April, 1897, number of the *Annals of Ophthalmology*, in which journal Dr. Francis B. Kellogg, under the title “Electrolysis for Xanthelasma,” relates the incomplete history of a case in which he used the needle. But since, at the patient’s last visit, the scars and “xanthelasma” had not entirely disappeared, it cannot be called a complete success, although the treatment gave great improvement. The doctor advises a weak current and long exposure.

I suggested to my patient the possibility of a cure from the use of the galvanic current; she at once asked that it be tried. A current of five milliamperes was applied—for five minutes—to each xanthoma. As soon as the pricking became painful, the current was broken for a few seconds. A specially devised electrode—with hard rubber insulation—was used. Two pliable silver rods, $\frac{3}{32}$ of an inch in diameter, were so adjusted as to be easily approached to contact or separated to two inches. These two electrode points, wet in salt water, were so separated as to bring one at each end of the patch, on the normal skin. After the second application—two weeks from the first—an improvement was evident, and at the end of fifteen treatments all of the deposits had disappeared, leaving the skin in a normal condition, much to the delight of all interested. The success of the treatment in this case—which is, so far as I know, unique—has been so highly satisfactory that I should recommend it to you as the one simple, safe, and thoroughly cosmetic method of removing xanthomæ.

HAMAMELIS is useful in dysentery when the amount of blood in the stools is unusual in quantity, amounting to an actual hæmorrhage; it is generally dark, in small clots or patches scattered through the mucus.

EDITORIAL.

WM. H. BIGLER, A.M., M.D.

WM. W. VAN BAUN, M.D.

EXPERTO CREDE.

IN the *Medical and Surgical Reporter* of October 30th we read an editorial, entitled "No Admittance to Homœopaths," apropos of the failure of the Hahnemann Hospital College of San Francisco to have itself made part of the State University.

The writer says, "It is difficult to discuss the subject of homœopathy from a standpoint at once well-informed and impartial," and, "The physician who understands the difference, with the understanding of one specially trained to appreciate the problems involved, can scarcely succeed in convincing even himself (much less anyone else—Eds.) that he is able to discuss the question with absolute and judicial impartiality."

We admit that the writer may have made an attempt to consider the question impartially, although there is no evidence of the same, but we must insist that he did not at all know how to set about it, and that the difficulty was for him a real one. We can see no difficulty, if we are willing to approach the question as we would any other scientific problem, with a mind free from preconceived and imperfect notions, and with a clearly-defined conception of the terms used and the task set before us.

Let us see whether this is the case in the present instance. Throughout the entire article the term "physician" is opposed to "homœopath." Had we not, in some unaccountable way, been rather favorably impressed with the promised impartiality, on the *first* reading, we would be inclined to resent this; but as it is, we only commiserate the ignorance and want of logic which it displays. It is no doubt based upon the further assertion that "we have to contrast a school or sect with what is not a school, but the very profession. The sect essentially is founded upon dogma, and the dogma of one individual."

This might be applicable were homœopathy and Hahnemannianism synonymous terms; but for us who, for the last quarter

of a century, have reiterated, again and again, that homœopathy is not Hahnemannianism, it has no force. We, together with the large majority of homœopathic physicians, who honor Hahnemann for reasserting the law of similars, and for his efforts to prove the universality of its application by means which are coming more and more to be regarded as the only scientific and reliable ones by investigators everywhere, do not feel that loyalty to this principle compels us, unthinkingly and slavishly, to adopt and follow all the dogmas of Hahnemann, nor does it debar us from efforts to investigate the principle itself, and to seek to limit or to widen its applicability, by defining the contents of the terms in which it is embodied, *similia similibus curantur*. This is no more a dogma of Hahnemann than the law of gravitation is a dogma of Newton.

By the use of the title "homœopath," we simply wish to indicate that in our choice of a remedy for its curative effects we prefer to be guided by a principle rather than by contradictory empiricism, an empiricism based upon "physicians'" opinions, "which themselves differ according to the length of time since they left the medical school, and according to their experience and incidents of life," as Dr. Elmer Lee, Vice-President of the American Academy of Medicine, and Chairman of the Section on State Medicine of the American Medical Association, says, very pertinently, in the *Medical Times* of November.

The tentative application of this principle in the past, together with the corroborative results of recent impartial and unsectarian scientific investigation, have shown that it can very properly be called not only a law of cure, but, within its proper sphere, the only reliable one.

The trouble seems to us to lie in the inadequate and often quite erroneous notions held as to the meaning of the word "cure." Let our brethren examine their so-called cures with an unprejudiced mind, and with that logic and acumen which they bring to bear upon questions of pathology and diagnosis, and we are sure they will have to confess that in very many cases the term is a misnomer. Is a diseased heart cured by helping restore the compensation? Is a diarrhœa cured by paralyzing peristalsis? The same thing applies also in our own profession to many recoveries from symptoms regarded as cures, but which are only more or less permanent palliations.

Our insistence upon the law of similars as being the only reliable one in the cure of curable diseases does not in any way, not even by implication, make him who makes use of other means to palliate symptoms either a dishonest physician or a mongrel homœopath. If, then, "the profession" means the profession of scientific therapeutists, then are we, with our law and this liberty, that profession, while the others are a lawless conglomerate of empirical practitioners.

The writer of the editorial very correctly and cogently says: "Impersonally considered, the physician is not at all a man theory-bound. He may hold them, but only tentatively, and as working hypotheses. He may even believe in a theory, and yet in practice often find it necessary to go counter to that theory."

If the writer will take into consideration that according to the number of instances in which the physician has found his theory to be correct, and according to the conviction of its truth that he has thus obtained by his own experience and by the experience of others, will be the readiness with which he will be tempted to abandon his theory, and that, if he have the modesty of the truly wise man, he will be more inclined to ascribe his want of results in some cases to his own ignorance than to the incorrectness of a well-substantiated theory, then perhaps he will be in condition to discuss homœopathy with impartiality.

It seems almost a waste of energy to attempt to bring our opponents to a logical consideration of their attitude towards homœopathy. There is such an amount of dense ignorance, wilful misrepresentation and hereditary blindness to be overcome, that even a Hercules might hesitate to undertake the task of cleansing the Augean stables of their minds.

With all their boasted and gladly-recognized valuable discoveries in subjects allied to therapeutics, in this latter domain their own leaders lament their want of progress along the lines hitherto followed. One would suppose that any new way, which held out any prospect of leading them out of the maze of uncertainty and shifting empiricism, would be investigated and put to the test with, at least, as much enthusiasm as they take up every new coal-tar product, tuberculin or serum.

Were there no theories of disease and cure advanced in

medicine before or since the time of Hahnemann? Were their authors ostracized and persecuted, and their theories rejected with ridicule and without trial? Homœopathy is not founded upon the imaginative vaporings of an unbalanced enthusiast. Let the history of the life, learning and work of Hahnemann show that his theory of the existence of a universal law of cure is justly entitled to at least as much attention and investigation as were accorded to less worthy ones. We ask no favors. We do not appeal to faith, but we do demand an impartial trial and a comparison of results.

“Whenever homœopathy has had a fair chance to demonstrate its virtues, it has always shown itself, as a system of internal medicine, to be superior to any other method with which it has been brought into competition.” The latest proof of this is found in the fact that “the mortality-rate in the homœopathic wards of Cook County Hospital is 3 per cent. less than the mortality-rate in the wards where the patients receive allopathic or eclectic treatment. The figures are made up after an examination of the hospital records covering a period of five years and the treatment of 50,000 cases.” (*Medical Era*, November, 1897.)

In an able article in the *New England Gazette* for November, the author, Dr. C. Wesselhoeft, calls for the same comparison “to discover which method of using drugs in the cure of disease is the best,” “not in the form of a challenge, but in the form of a proposition, having for its object an honest scientific test.”

How much more just and “rational” this sounds than the utterances of the editorial which we are reviewing. It says: “Physicians and homœopaths cannot be expected to work harmoniously in ordinary practice, or in insane asylums, or in government service, or to join forces in teaching medicine, simply because the profession (Heaven save the mark!) cannot accept the dicta of Hahnemann as safe, reliable or responsible bases of practice.” Are the gratuitous dicta of their own leaders any more safe, reliable or responsible?

Our editorial dignity will not allow us to give utterance to the thoughts which involuntarily arise when we read the closing remarks of our friend who seeks to be impartial, but who evidently found it quite beyond his powers. Classing all ho-

mœopaths as either knaves or fools, it is a wonder he was willing to say, in his opening remarks, "Probably few regular physicians have more personal friends among practitioners of homœopathic predilections than has the writer." We must allow ourselves one reflection: Birds of a feather flock together. With which of the two classes does he flock?

As to the question of the advisability of opening the doors of State universities to the teaching of homœopathy, it seems to us that its exclusion militates against the true idea of a university. Our own idea would be that the so-called elementary branches of a medical education should be taught by teachers paid by the State, but that the halls of the university should be open to teachers of *every* method of application of these branches; these latter, however, to look for their remuneration to fees from their students and to contributions from the adherents of their respective views outside.

In the instance given in the editorial, where the attempt to have homœopathy represented in a State university was successful, but where it caused "friction" and "hostility," the cause is not far to seek. The editorial says: "At once, and for years to follow, members of the regular faculty were looked upon with suspicion by their colleagues in medical societies, and were continually forced to apologies and explanations." Where such a spirit of irrational prejudice and intolerance prevails, what better things were to be expected?

Until, therefore, the advocates of "rational medicine" show that they are rational, and until the adherents of "scientific medicine" prove that they can rise to a true conception of what constitutes science, it would be well for us to occupy ourselves with the unfolding and elaborating, by real scientific methods, of the truth which we possess, trusting to its inherent power to prevail in spite of all the obstacles which a self-satisfied ignorance may place in its way.

THE DIAGNOSIS OF OSTEOMALACIA BY THE ROENTGEN RAYS.—Giebel has ascertained that in osteomalacia, with removal of the chalk salts from the bones, the shadows are very light, and may even be absent in the middle of the bone—*i.e.*, in the axis—as compared with sound bones.

Senator, of Berlin, recommends the use of oophorin.

GLEANNINGS.

THE NEURON AND ITS RELATION TO DISEASE.—Gowers, in his introductory address at the National Hospital for the Paralyzed and Epileptic, discusses the revolutionary change in our conception of the structure of the nervous system brought about by Golgi's use of silver as a stain. Although silver has long been used as a stain, the new method, in which the structure has previously been acted on by chromium, and usually osmic acid, reveals in hitherto unknown distinctness the course and form of the processes of nerve cells in the grey matter. Hitherto it had been believed that these processes joined to form continuous paths by which the nerve impulse was conveyed. Now it is known that these branching processes, "dendrons," end in the matrix in which the cells lie; each cell and its processes is a discontinuous element, from which an impulse must pass by some unseen path through the matrix in which the processes end. Each of these elements is a neuron. Moreover, it has been found that the axis cylinder or "axon" is not, as long supposed, a single conducting path, but consists of a number of fibrils, each a distinct conducting path. It was formerly noted that the axis-cylinder divides, and this is now seen to be simply a separation of the fibrils. This explains the way in which sensations coming from small areas are differentiated. These fibrils pass uninterruptedly through the nerve cells to the branching processes and end at the termination of their branches. They may be seen merely skirting the cell body, going from one process to another sometimes, or from several processes to the large axis-cylinder process. From that fact the author makes a momentous deduction. Those fibrils passing continuously through the cell body can only conduct through the cell body; our old conception that the nerve impulses originate in the cells—fascinating from the analogy of the cell body to a tiny battery originating a current—entirely disappears. The cell body is the vital centre, upon which depends the life of the processes. The impulses, however, arise at the extremities of the dendrons in consequence of some influence which passes through the matrix from other processes. We have no means of conjecturing whether these impulses pass in some way unaltered through the matrix to the extremities of the other dendrons, or whether some influence which is not the same as the conducted impulse is generated in the matrix, but we conceive that this may be a process of excitation of the fresh impulse.

This new knowledge of the discontinuity of nerve elements explains the arrest of secondary degeneration in the grey matter. For instance, the ascending degeneration in the spinal cord goes up to the grey matter of the medulla, and the degeneration which goes down the cord stops short of the motor nerve cell, through which, nevertheless, the impulse passes. This mystery is now explained. It has been another mystery why, in paralysis agitans, a senile degeneration of the motor cortex of the brain, we never get structural degeneration of the motor path; and why, in spite of the peculiar spasm, we never get

a foot clonus. But we now see that the spasm and rigidity must be the result of changes at the place where the impulses arise, *i.e.*, in the extremity of the dendron. The nerve cell being unaffected, no degeneration of the pyramidal fibres occurs, because their nutrition is unaffected; and it also ceases to be surprising that all search for morbid changes in the nerve cells has been in vain.—*Lancet*, Nov. 6, 1897. F. MORTIMER LAWRENCE, M.D.

BACTERIOLOGICAL DIAGNOSIS OF MALARIA.—Dr. DuBois Saint-Sevrin, from examination of a large number of soldiers returned from the expeditions to Dahomey and Madagascar who suffered from malaria, has gained a number of diagnostic and prognostic points of value. All doubtful cases of fever should be examined microscopically. He does not advise examining the blood without staining, for thus one may easily overlook the recent minute, little or non-pigmented varieties of the plasmodium. He employs a double stain of eosin and methyl-blue for the rapid study of this parasite. The finger is washed carefully with soap and water, then with a bichloride solution, dried, and a ligature placed around its root and the tip punctured with a needle which has been sterilized in the flame of an alcohol-lamp. A drop of blood is then collected on the middle of the slide, and a second slide placed over it, in the form of a cross. The upper one is then deftly and quickly drawn over the lower, thus spreading out the drop into a thin and uniform layer. The blood may either be allowed to dry spontaneously or by passing it rapidly through the flame of an alcohol-lamp, with the bloody side up. As soon as dry it may be fixed by dropping onto it a drop of a mixture of equal parts of ether and alcohol, which should be wholly evaporated. Then color by treating it with an aqueous solution of eosin, 1.100, or, better, a mixture of one part of eosin to sixty of alcohol and forty of water, for one to three minutes. Then wash it in a watch-crystal and expose it to the action of a concentrated solution of methyl-blue in distilled water, from a few seconds to four or five minutes. Then examine the specimen in water, recoloring if any of the staining solutions have not acted sufficiently, wash with xylol and mount in Canada balsam. A power of 400 to 600 diameters must be used, without immersion or Abbe's illumination, or, if this method of illumination be used, employing a more or less large aperture in the diaphragm.

In a patient with malarial fever in full development, the plasmodia are easily detected even if he has been under treatment by quinine. In the interior of the red corpuscles, more or less deformed, one or more plasmodia, colored blue, are to be found. The smallest are either not at all or but little pigmented. As the parasites increase in volume they become more pigmented, and the hæmoglobin disappears. The majority are irregular, amœboid in shape, and send out prolongations in the interior of the corpuscle. Some spherical bodies are met with, and only rarely crescentic forms. Finally, in the same specimen one may meet with rosettes with eight or nine smaller parts. These forms of segmentation, which denote a very rapid reproduction of the parasite, indicate the imminence of a continuous fever and the necessity of a prompt and energetic treatment, especially of the hypodermatic use of quinine. The presence of one alone of these elements is sufficient to diagnose paludism. Yet a diagnosis may often be made from the aspect of the blood alone, which is characteristic for several days after the cessation of febrile symptoms. It is distinguishable from the normal by the presence of

an excessive number of lymphocytes and eosinophile cells, of cells with a saddle-bag-shaped nucleus of a bluish color and with a more or less granular protoplasm, of a pale rose-color. At a later period the lymphocytes are also augmented in number and volume, and Ehrlich's cells are observed to appear whose protoplasm is filled with granulations in the form of cocci of a deep-red color, and whose nucleus is an almost colorless vacuole, at times slightly bluish.

During the period of apyrexia and in malarial cachexia, where quinine is being taken, no plasmodium may be discoverable. Nevertheless, an attentive examination will enable one to detect another resistant form of the parasite median or large-sized spherical bodies which are highly pigmented, or inclosed in a blood-corpuscle. Easily recognizable in fresh specimens from their form and pigmentation, they are the more so if colored. At times the plasmodia will be discovered in unusual numbers, which is an index of an approaching fever, and quinine then given will either prevent its outbreak or at least diminish its intensity. When in cachectic malarial conditions the plasmodia are absent the diagnosis is uncertain, and nothing will instruct one more than a study of the white blood-corpuscles.

Finally, he has observed in the beginning of certain complications so frequent in cachectic malarial states, as serous effusions or bronchitic tuberculosis, which cause painful febrile states, the number of leucocytes undergoing degeneration is enormous, reaching almost that of the red corpuscles. Such an appearance of the blood is an indication that the fever is certainly not due to the plasmodia, but is dependent on some visceral complication.—*Revista Medica de Sevilla*, Tomo xxvii., No. 7. FRANK H. PRITCHARD, M.D.

A NEW INCISION FOR THE REMOVAL OF THE APPENDIX VERMIFORMIS.—Carl V. Vischer, M.D., of Philadelphia, read before the A. R. Thomas Club the following in relation to this subject: Until recently, the peritoneal cavity was always opened by an incision through one of the aponeurotic lines, in this way dividing as little tissue as possible, and averting hæmorrhage. This incision was often followed by the development of so-called ventral or post-operative hernia,—hence the necessity for some method to obviate this difficulty. Among the various methods of suturing that were suggested, that of silver wire promised the most favorable results; yet the disadvantages accompanying the introduction of non-absorbable material soon became apparent. This led some operators to endeavor to overcome the difficulty by opening the abdomen through the muscular structures in place of the linea alba, or semilunaris, thus giving more tissue to approximate, and hence the formation of a thicker cicatrix. Then followed the suggestion of McBurney, to open the abdominal cavity by incising the integument and aponeurotic structures alone and separating the various muscles in the direction of their fibres. This method was first practiced for the removal of the vermiform appendix. The incision here is located at a point, however, where the abdominal parietes are largely made up of aponeurotic structures,—i.e., in the lateral portion of the anterior abdominal wall. That this incision presents some disadvantages every one who has had much experience with cases of appendicitis well knows. Whereas it answers admirably for the removal of the appendix "between attacks," it is not so satisfactory in acute cases, particularly those accompanied by pus-formation, inasmuch as one is frequently obliged to enter the peritoneal cavity to the median side of the inflammatory mass, and in this way drain

and remove the appendix through a non-infected area. Again, at times it is quite difficult to locate the appendix, and, finally, the relation of the parts are not conducive to free drainage. It therefore occurred to me that if an incision were made through a more muscular and dependent portion of the abdominal wall the above disadvantages could be overcome, and, in consequence, I have recently been making an incision an inch above and parallel to the crest of the ilium, beginning at the outer edge of the external oblique, and running forward to a point corresponding to the anterior superior iliac spine, or, if necessary, slightly beyond this. Having divided the skin and aponeurosis, the external oblique, which is found well developed at this point, and its fibres running nearly vertical, is separated, after which the internal oblique and transversalis, which are also well developed and whose fibres run nearly on one plane, are separated, exposing the transversalis fascia. This, together with the peritoneum, is divided in a vertical direction. This will be found to have opened the peritoneal cavity at its lowermost plane and near to the attachment of the cæcum. A finger, now being introduced, invariably comes in contact with the caput coli, which can be readily drawn into the wound, and thereby facilitate the search for the appendix. In suppurative cases, the pus cavity being opened at this point, drainage follows at the most dependent point. Possibly the greatest disadvantage offered by this incision is the depth of the wound, which, particularly in those inclined to be corpulent, may make manipulation somewhat difficult; the hæmorrhage, which has been found to take place from a small muscular branch of the circumflex iliac artery, can readily be controlled. The advantages are, first, from the position of the wound, it is almost impossible for hernia to occur even when it is allowed to heal by granulation; second, it offers a dependent point favorable for drainage; third, the facility with which the cæcum and appendix are found.—*Annals of Surgery*, November, 1897.

COCAINIZING THE MALE URETHRA.—Dr. F. Walter Brierly, of Philadelphia, reports: The very conditions that make cocaineization of the urethra desirable, also make it difficult. The walls are plastered with pus or mucus, keeping the anæsthetic from direct contact with the nerve endings. It is a well-known fact, too, that cocaine unites chemically with albuminoid compounds, forming an inert substance. The incidental use of hydrogen dioxide in one of my cases before injecting the cocaine, and the satisfactory result produced, has led me to the constant employment of this method. The urethra is filled with the hydrogen dioxide (one part to three of water), and the canal thoroughly cleansed of pus, mucus, shreds, etc.; then washed out with plain sterilized water, and a 4 per cent. sterile solution of cocaine injected. It takes a much shorter time for the cocaine to act, and the anæsthesia is much more complete than when the cocaine is injected into a dirty urethra.

THE RESORPTION TREATMENT OF INFLAMED GENITALIA.—Fehling considers that the excision of inflamed genitalia is practiced too often, and more attention should be paid to the pathology of these diseases. As a general therapeutic maxim, an inflammatory process due to any infection should not be operated upon, but should be treated by the older antiphlogistic method. If suppuration occurs, an operation should be performed. Between these two stages is one of infiltration or exudation, which should be treated by resorbing

methods. In this middle chronic stage of inflammation without fever I have employed iodine, ichthyol, brine baths, douches, massage, etc., and lately have tried continuous pressure for several hours a day on the pelvic organs by means of a shot-bag. The shot-bag is prepared in the following manner: a very strong rubber condom is drawn over a cylindrical speculum, which is introduced into the vagina with the pelvis elevated, and filled with No. 3 shot. After stroking up the iliac flexures, another rubber bag filled with shot and weighing several pounds is applied to the iliac regions. After a few hours' use, the shot-bag in the vagina has adapted itself completely to the contour of the vagina. The vagina is lengthened and considerably dilated. All the pelvic organs are elevated; the lower portion of the abdomen is deeply depressed for some time after removing the external weight, and palpation of the finest details of the pelvis is greatly facilitated. Excellent success has been obtained by this method in the treatment of chronic perimetritis, parametritis, swelling of the adnexa in partly adherent retroflexions of the uterus, in cicatricial and in infantile contraction of the vagina. After the application of pressure in this manner has been sufficiently observed, the well-known methods of resorption can be used. This method of treatment has been mentioned by Auvard in his text-book (*Traité de Gynécologie*).—*Centralblatt für Gynäkologie*, No. 40.

OPERATIONS FOR HÆMORRHOIDS.—Sanger recommends either simple removal with suture of the wound, or removal with ligature in sections.

Hard, fibrous external hæmorrhoids and those not distended by blood, and with but few succulent nodules between, are best suited to the first method. They are simply cut off with scalpel or scissors, and the anal mucous membrane and external skin are sewed together without tension. Venous hæmorrhage ceases at once, and the smaller arteries retract.

The second method is adapted to internal hæmorrhoids occurring in single groups. These are ligated in sections with fine silk and then removed. The mucous membrane is then united with fine sutures. If the nodule is round and thick, so that the wounded margins cannot be brought together, it can be enucleated as practiced in England.—*Ibid.*

PRODUCING STERILITY BY SECTION OF THE FALLOPIAN TUBES.—(Fritsch.) This operation is often desirable in making a vaginal fixation of the uterus to avoid the dangers of labor. Kehrer's method is recommended. The vagina is opened longitudinally in the typical manner, the bladder separated, and the angle of the uterus drawn into the wound. The tube is ligated with catgut in two portions, and a piece a half an inch long removed between the two ligatures, and repeated on the opposite side. The typical vaginal fixation is then performed. I intentionally resect a portion of the tube, as I found, in an earlier case, after I had performed a laparotomy and myoma enucleation from the uterus, and had tied both tubes firmly in the middle with silk, but did not divide the tubes, that this woman became pregnant three years later, and had a normal labor. I have also observed, after ligating the intestine in dogs, that when the animal did not die from ileus, the intestine swelled up and became adherent over the ligature—as with a Murphy's button—and the canal formed again. A similar condition might have taken place with the Fallopian tubes.—*Ibid.*

GEORGE R. SOUTHWICK, M.D.

MONTHLY RETROSPECT

OF HOMŒOPATHIC MATERIA MEDICA AND THERAPEUTICS.

SERUM-THERAPY AND HOMŒOPATHY.—In the *Monthly Homœopathic Review* (November 1, 1897), Johnstone, of London, carefully reviews the question of serum-therapy, especially as represented by antitoxin in the treatment of diphtheria. He describes in detail the processes by which the toxin is prepared, the horse immunized and later bled, and the method of separating the antitoxin from the blood. He acknowledges that antitoxin can never produce diphtheria, nor at present can any definite and reliable explanation be made of its mode of action. As to the origin of the antitoxin, he quotes the views of Behring, Emmerich and Roux, which may be classified thus:

1. That antitoxin is a specific product of the tissues of the immunized animal.

2. That it is produced from the cells of the bacteria, and has the same origin as the toxin.

3. That it is the combination of some element of the blood with the toxin.

The latest theory (Ehrlich) to account for the action of the various serums is that they are of chemically active nature, the toxins being so likewise, and that when the two bodies meet a chemically and physiologically inert double salt is produced.

The author goes on to review the effects in health and disease, quoting at considerable length the available statistics as to mortality, and showing, by reference to the diphtheria cases for ten months at the London Homœopathic Hospital, that antitoxin apparently gives better results than the ordinary homœopathic treatment. Quoting the statistics of the total number of cases of diphtheria treated at the hospital since 1892 shows:

1. That pure homœopathic treatment before 1896 gave a lower mortality than the old-school treatment.

2. That homœopathic treatment combined with serum treatment gives a lower mortality than the average serum treatment aided by allopathy.

As to the relation of serum-therapy to homœopathy the author feels less free to speak, but he endeavors to make it clear that these two pathies are not really at variance, but are both regulated by the same underlying principle. It is a difficult matter to formulate any universally recognized acceptance of the mode of action of drugs applied in accordance with the homœopathic principle. The general opinion, however, is that the dose of that drug which pathogenetically is as near the similia of the disease as it is possible to be, acts in some dynamic way upon the tissues of the body, and more particularly the diseased tissues, and thereby (1) either excites the cell to increased resistance against, or (2) antagonizes and cancels the morbid agent.

The author cites as an example of this action arsenic in eczema, and by a

schematic presentation in parallel columns shows that the drug is almost exactly in its method of action as is the toxin (through antitoxin) in diphtheria. He concludes with the following expression of his own convictions:

1. Serum-therapy in diphtheria is an improvement on ordinary treatment.
2. It is an improvement to a less degree on homœopathic treatment.
3. The antitoxin itself is not comparable to a homœopathic remedy, but the toxin is so comparable.
4. Serum-therapy is therefore based on the homœopathic principle, and is another example of our guiding precept: *Similia similibus curantur*.—*Monthly Homœopathic Review*, Nov. 1, 1897.

THE MODE OF ACTION OF MEDICINES.—Bodman, of London, reviews the address of Prof. Leech, of Manchester, delivered, under the above title, to the Section of Pharmacology and Therapeutics at the recent Montreal meeting of the British Medical Association. After passing in review some of the older theories of the action of medicine, Prof. Leech discusses the modern development of pharmacology, and acknowledges that, while it has explained the action of many palliatives, it has been incapable of explaining the class of remedies known as specifics, nor has it made any addition to that limited class. In referring to the recent remarkable developments in bacteriology and pathology, however, Prof. Leech refers to the toxins and antitoxins, with a suggestion that these may throw light upon the action of the older remedies. He argues, in the first place, that it has been shown that the toxins of the various pathogenic bacteria, when introduced into the organism, lead to the production of antitoxins, the antitoxins being produced, probably, by the protoplasm itself under the influence exerted by the toxin. These toxins have a definite physiological action, and there is no reason to doubt that they act upon the tissues in a similar manner to other medicines. Therefore it is probable that ordinary medicinal agents have the power of causing the protoplasm to produce an active substance similar to the antitoxin. After quoting some experiments of Ehrlich which afford striking support to this view, Prof. Leech concludes by asking:

“May it be, as has been suggested, that drugs do something more than influence molecular conditions, that they cause the production of something which is itself an active agent—that, for example, in the case of mercury it is not the metal itself which antagonizes the syphilitic poison, but something which it causes the protoplasm to produce and pour into the circulation?”

Bodman, having thus far quoted Prof. Leech, goes on to ask what light this reasoning would throw upon the choice of a remedy in a given case of disease should the action of the remedy be in the same or in an opposite direction to that of the morbidic poison which it is sought to counteract? The aim is to give a drug which will induce the protoplasm to form and pour into the circulation a substance which will antagonize the morbidic poison—a defensive substance. But Ehrlich's experiments show that the substance produced in the blood as the result of giving a drug acts in the opposite direction to the drug given, and tends to neutralize it. Therefore, since the defensive substance acts in the opposite direction to the morbidic poison, and the defensive substance also acts in the opposite direction to the drug which causes its formation, it follows that the action of the remedial drug must be in the same direction as that of the morbidic poison, which is only another way of

expressing the law *similia similibus curantur*. The author seems, therefore, to be justified in the assertion that if the arguments of Prof. Leech are reasonable, he has established the reasonableness of a belief in the law of similars.—*Monthly Homoeopathic Review*, Nov., 1897.

BELLADONNA IN ACTIVE CEREBRAL CONGESTION.—Kershaw, of St. Louis, recalls that belladonna is needed when the arteries of the brain are overcharged with blood, with consequent redness of the face, injection of the eyes, sense of heat, pressure, and cephalalgia. The headache is of throbbing character and there may be noises in the ears. There may be numbness of one side of the body—this is a dangerous symptom, showing that cerebral pressure is intense, that the motor area is involved, the danger line reached, and that there is a strong probability of hæmorrhage and consequent paralysis of one side of the body—hemiplegia. Sometimes a case of active cerebral congestion becomes maniacal: sometimes an epileptiform seizure occurs during the height of the cerebral congestion. In other cases a comatose condition follows, in which there is no hæmorrhage but intense congestion, with perhaps active arterial pressure associated with passive congestion due to a slow emptying of the cerebral sinuses of their contents. In such cases as these belladonna is the principal remedy. Apart from the drug treatment, the patient should be placed in a cool room, with the head slightly elevated, care being taken that the neck is not bent in any way; the object being to retard the flow of arterial blood to the brain and permit the easy passage of the venous blood from the brain. If the head is very hot, cold applications or the ice-bag may be employed. Rectal injections of hot water and glycerine should be given to relieve the intestines of their contents. Massage should be employed judiciously. When there is no immediate danger of hæmorrhage, exercise should be taken—this applies to all cases of cerebral hyperæmia. When marked numbness is present absolute quiet should be enjoined. Freedom, care and mental excitement of any kind, pleasant or unpleasant, should be avoided. A liquid diet, with abstinence from alcohol in any form, is all important. A change of scene is often helpful, because the patient is able to get away from the probable exciting cause of his trouble.—*Medical Arena*, Oct., 1897.

THE EFFECTS OF OPIUM ON THE SKIN.—Evans, of Chicago, in the course of a careful study of opium and its extractives, notes that itching of the skin is a result of opium even when administered in minimum doses, and is often excessive and extremely irritating. It also produces a general erythematous redness of the skin extending over the whole body; also a fine miliary eruption that may or may not be reddened. The color of the skin is dark or bluish red or lead color. Even hives have followed its use. The skin is sallow and sometimes jaundiced, the features are relaxed and seem to hang down. Profuse perspiration bathes the skin; it is quite free, lasts for hours and is warm in character. In the opium-eater it is darkened by the excretion of the drug and stains the underclothing.—*The Clinique*, Oct. 15, 1897.

THE TREATMENT OF ABDOMINAL TUBERCULOSIS IN CHILDREN.—In a paper read before the British Homoeopathic Congress, Day, of London, reviews the subject of tuberculosis of the abdomen in children, and presents the histories of five cases occurring in his own practice. Generalizing as to remedies, he considers that iodide of arsenic 3 and 3x may be called the sheet-anchor of

this disease and of tubercular lesions generally; then iodine 3, or combined with lime or sulphur, as calc. iod. 3 or sulph. iod. 3x; apis 3x helps absorption of ascites; hepar s. 3 for the caseating glands; sulphur 3 or 30 as an intercurrent remedy. Calc. carb. 6 must not be forgotten, also calc. phos. 3x.

It is not sufficient simply to give these remedies. A general survey of the peculiarities of the case is important. Intestinal irrigation is of great use where the diarrhœa is frequent and offensive, and is best given by means of a hydrostatic douche. The question of diet is all-important, and milk, boiled or peptonized or humanized, stands first. Raw-meat sandwiches or one of the many meat-juices may be given, but take care that the diarrhœa is not increased thereby. Cod-liver oil is highly beneficial, or some preparation which contains it. Inunctions of warm olive oil or cocoa butter are of great value in improving nutrition. Massage and sea-baths are recommended, and the value of abdominal incision is to be considered.—*Monthly Homœopathic Review*, October 1, 1897.

THE TREATMENT OF VAGINITIS.—Gutherz, of St. Louis, states that in acute vaginitis under homœopathic treatment a cure may be anticipated; but in chronic cases, when the follicles of the vagina are hypertrophied and pour out an abnormal discharge, the prognosis is less assuring. In treatment the aim must be to reduce inflammation and build up the system and thus lessen the tendency to take cold, and by local means to quiet pain and irritation. Absolute rest in a horizontal position is essential, and good results frequently result from injections of warm water, bran-water, hydrastis and glycerine (1 drachm to the ounce, in 1 pint of tepid water) thrown into the vagina three times a day. Remedially, aconite is most frequently indicated in the fever of the first stage, with dryness of the vagina and rigors up and down the back; or belladonna, when there is great heat and soreness and dread of being touched. Cantharides will be thought of if there be dysuria; arsenicum when the discharge is excoriating and the patient is subject to profuse menstruation; carbo vegetabilis and mercury solubilis in an ulcerated condition of the vagina; sepia when leucorrhœa is profuse after micturition, the discharge being corrosive and fetid and inflammation having extended into the urethra; cimicifuga when there is intense pain in the ovaries and in rheumatic subjects. In the specific variety, involving the urethra, vagina and vulva, and caused by the absorption of the poison, and where there is danger of the morbid action passing up into the uterus and causing endometritis, or into the bladder and causing cystitis, or leading to the formation of labial abscess, aconite forms the advance guard, with cannabis sativa, cantharis, hepar, sulphur, and mercurius iod., forming a solid phalanx about it. In the diphtheritic variety, carefully consider the mercuries, arsenicum, apis, lachesis, and nitric acid; for the prognosis in this form of vaginitis is necessarily grave.—*Clinical Reporter*, Sept., 1897.

THE THERAPEUTICS OF LEUCORRHOEA.—Ward, of San Francisco, after a thoughtful clinical and bacteriological study of the uterine and vaginal discharges, suggests the use of the following drugs:

Calcarca carb. contains in its pathogenesis a milky discharge, producing heat and itching of the vulva. Menses early and profuse, with aggravation of leucorrhœa before the period. Mentally ill-humored; cries easily and fears she will lose her reason. The sixth trituration three times daily.

Sepia.—Discharge from the vagina is either decidedly yellow and purulent or greenish, watery, fetid and acid. It is accompanied by oppression of breathing, weight in the abdomen, stitching pains in the uterus, pruritis of vagina and vulva, with excoriation. The third decimal trituration, in five-grain powders, four times in twenty-four hours.

Pulsatilla is of special value in chlorotic leucorrhœa. The discharge is milky or thick. It appears before or after the menses, and is associated with swelling of the vulva and uterine colic; sometimes the leucorrhœa replaces the menses. Menses are suppressed or delayed and scanty; semilateral headache, relieved by pressure and the open air. Second decimal dilution.

Graphites.—Weakness of the back co-exists with very liquid, perfectly white discharge, often associated with a papulous itching eruption of the external genitals and distended abdomen. The discharge gushes out when rising in the morning or squatting. Sixth decimal trituration morning and evening for six days, then discontinue for six days, then commence again.

Kreosotum.—Early, profuse, protracted, intermittent menses, also fetid, corrosive leucorrhœa, especially preceding menstruation, staining linen yellow and accompanied by abdominal bloating. First three dilutions.

Mercurius.—Discharges of greenish pus and mucus or flocks. The discharge produces burning and is corroding, with sense of rawness. All symptoms intensified during evening and night. The patient is subject to uterine hæmorrhage. Sixth potency.

Ferrum.—Useful in the chlorotic form. Menses are late, scanty or totally lacking; leucorrhœa mild, milky, with itching and soreness. *Ferrum redactum* 2x before each meal.

Sulphur.—After calcarea. Leucorrhœa before menses, preceded by cutting colic and pinching around navel; leucorrhœa of yellow mucus, burning and smarting like salt. Twelfth trituration three times a day.

Causticum.—Profuse leucorrhœa, flowing like the menses and having same odor; worse at night. Menses flow chiefly during the day and are excoriating. Sixth to twelfth dilution.

Alum.—Menses too pale and short; pain before their development. Leucorrhœa corrosive; relief from use of cold washes. Constipation. Twelfth potency.

Helonius is recommended by Hughes in women affected with prolapse, mucous or watery leucorrhœa, with general weakness. Mother tincture or lower dilutions.

Zincum.—Thick or bloody leucorrhœa, causing an itching preceded by cutting colic. Left ovarian pain, relieved during menstruation. Third trituration.

In conclusion, Dr. Ward emphasizes the value of salt water as douche or hip-bath. If the genitals are hot, painful and sensitive, warm or even hot water may be used; while if the parts seem cold, relaxed or almost insensitive, small quantities of quite cold water may be employed.—*Pacific Coast Journal of Homœopathy*, 1897.

THE CHARACTERISTICS OF RHUS.—Taylor, of Chicago, recalls the fact that *rhus tox.* belongs to a class of remedies which produce and cure a derangement of the normal condition characterized, among other things, by pains which are worse when beginning to move and better on continued motion.

This symptom alone too often serves as the imperfect basis of a prescription. One symptom can never convey a definite idea of the sphere of action of a remedy. It is the perspective that decides.

In its rheumatic tendencies and painful manifestations rhus corresponds to a morbid condition often characterized by the patient as "stiff as a stage-horse;" and indeed there is much in the life of the nearly obsolete stage-horse to generate a condition for which rhus is often the remedy. The over exertion and exposure to the inclemency of the weather incident to the life of a stage-horse soon results in that stiffened condition of joints, muscles and tendons which give rise to aching pains, worse on beginning to move, better from continued motion, which constitutes one of the leading indications for rhus.

However, it is obvious that other ætiological factors than those just mentioned may give rise to this stiffened "stage-horse" condition, and hence we should remember the concomitants and modifying factors in considering the remedies which have in common this feature of "worse on beginning to move, better from continued motion." The rhus patient is worse at night, worse at rest, worse from cold, and especially worse from damp, rainy weather; better from warmth, from continued motion, from stretching out the limbs. When you have the stiffened condition with these modalities rhus will do the work, but "worse on beginning to move, better from continued motion" may also indicate either capsicum, causticum, veratrum alb., conium, euphorbium, ferrum, pulsatilla, lycopodium, or valerian.—*Medical Advance*, Sept., 1897.

THE ACTION OF SULPHUR.—Evans, of Chicago, observes that this mineral induces in the animal body a sluggish circulation in the venous capillaries, commencing in slight degree and gradually increasing until a decided venous enlargement has resulted, when not only the capillaries, but the entire venous system, has become more or less involved. This state has been attributed to a slowly-advancing disease in the ganglionic system of nerves, implicating the cerebro-spinal system at a later period. At any rate, the progress of these conditions, either primarily or simultaneously, is essentially chronic in character, and sooner or later implicates all organs in the body, deranging their functions and changing the structure of tissues. So decided is this venous stasis that chronic congestion is found to be present whenever sulphur or the diseases to which it is analogous have for any considerable time exerted their influence upon the body-cells. Therefore the sulphur disease, artificial or natural, is essentially of low grade and chronic character. Sulphur, having the property of inducing such a constitutional state, is, therefore, one of the remedies capable of eradicating it when structural lesions have not gone too far or exhaustion of function has not been too great. For this reason it is a drug to be given when the general condition is such that complaints, numerous but not severe, have been present during a long period. At the same time, it is not infrequently called for in acute diseases, particularly the acute exanthemata, when the modified constitution of the patient has caused a deviation from the natural course.—*The Clinic*, 1897.

IODINE AND BROMINE IN CROUP.—In differentiating between iodine and bromine, note that iodine in its general influence is excitant, while bromine is depressant. Hence iodine is claimed to be preferable in sporadic croup in previously healthy subjects, while bromine is more useful when the false membrane in the air-passages is produced by the diphtheritic poison.—*Medical Counsellor*, 1897.

F. MORTIMER LAWRENCE, M.D.

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